

Patterns of Squatting in Phnom Penh:
An Evaluation of The Socio- Economic Characteristics of Squatters and
Their Reasons For Squatting

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ABSTRACT:

There is a dominant theoretical perception that squatter settlements in cities of most developing countries result from the mass migration of the poor, rural population to urban areas where they mostly end up squatting. Many observers believe most squatters to be new, rural to urban migrants who fail to earn enough to support themselves - especially within urban legal or formal housing markets. Such a belief also often prompts government authorities to take firm action against squatter settlers. The action is often forceful and cruel, like squatter demolition and eviction, and can even extend to governments restricting movement from rural to urban areas through their migration policies.

The aim of this study is to test the above conceptual views through an examination of squatter settlements in Phnom Penh city. It is based on the two hypotheses that the main reason for squatting is for reasons other than searching for cheaper accommodation; and secondly that most squatters are not poor, new, rural to urban migrants. In other words, there is no relationship between squatting and the status of squatters' migration and level of wealth.

Unlike the dominant theoretical views mentioned earlier, the findings of this study shows that in the case of squatter settlements in Phnom Penh city most squatters are long-term and not necessarily the poorest residents compared to slum dwellers and even the rest of the urban population. Thus, new rural-Phnom Penh migrants are not the main cause of the existence and growth of the city's squatter settlements. It further shows that most squatters are only the indirect squatters (rented tenants and buyers), which implies that squatter landlords invade the land for mere commercial purposes rather than in a search for cheaper accommodation.

The study therefore suggests that the widely criticised government policies of demolition and eviction hardly touch the problems and only have effect on the indirect squatters. The direct squatters or land invaders, however, enjoy almost immunity of prosecution by land owners and the government and even if there is squatter evacuation programme, they do not suffer from such legal action since they have already made enough profits from selling and renting properties to the second squatter settlers (or indirect squatters).

I wish to dedicate this dissertation to my father, Ky Beng Hong, and my mother, Mom Doung Socheat, and all members of my family whose love, encouragement, advice and cheerful support enabled me to overcome all the illnesses and obstacles, and to complete this study. My parents have a strong belief in education. Defying precarious economic circumstances and through great personal sacrifice they put the five of us through higher education.

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PART I: INTRODUCTION

Chapter One: Introduction, the Study's Issue, Research Questions and Hypotheses, Squatting in Phnom Penh, Brief History of Urbanization and Development of Cambodia and Phnom Penh City, and the Structure of the Thesis

Introduction:

The aim of this chapter is to provide the main objectives and to state the research problems and hypotheses of this study in the light of literature background. The chapter consists of 6 sections. Section 1 discusses the main argument of this study based on which research questions and hypotheses are drawn. Section 2 provides an overview of squatting in Phnom Penh city in general and the characteristics of the studied squatter and slum settlements in particular. Section 3 provides a brief history of the impact of political changes on the urbanization and development of Cambodia in general and briefly discusses the impact of each political change on the urbanization and development process in Phnom Penh since the 1960s to the present. Section 4 discusses the recent housing in Phnom Penh, including recent government legislation on land and housing since 1979. Section 5 discusses the function of housing markets in Cambodia and in Phnom Penh in particular. Lastly, Section 6 lays out the structure of this research thesis.

1-1 Is Squatting matter?- Some Arguments on the Literature on Squatting, and the Research Questions and Hypotheses:

- The Case of Phnom Penh:

Although there are no formal reports¹ about serious problems of squatting in other cities of Cambodia, it is a serious and as yet unresolved issue in Phnom Penh, and there has been many clashes between authorities and squatters since 1991 (Informal interviews with local authorities: October, 1996). Squatting is an increasing phenomenon in Phnom Penh as both the number of squatter settlements and the size of the squatter population have increased since the first data was

¹ There are, however, hundreds of reports and complaints about agricultural land disputes in many provinces of the country but not urban squatting (See the definition of squatting in Chapter 2). These land disputes involve areas that were subjected to heavy fighting during the Cambodian war, have no clear ownership and remained mostly uncultivated. In other words, most cases of squatting occur on agricultural land.

recorded (although prior to 1994 data on the squatter population was unreliable and in some cases unavailable because no formal data was collected).

Squatting increased from involving 187 settlements with a total population of around 38.000 or 6.324 families in 1994 to 379 settlements with 30.150 families or a population of 171.730 in 1997 (Urban Sector Group and Phnom Penh municipality: 1997). The squatter population in 1997 equalled around 17.1 per cent of the estimated city population of 1 million. Although the number of new squatter areas is unlikely to increase due to the unavailability of land and other legal factors, in contrast, the population of such settlements is likely to continue to increase.

This is because Phnom Penh is the centre of almost all of the country's economic growth and development. The city has attracted most of the industrial development, which in turn attracts hundreds of thousands of rural labourers. It is the purpose of this study to investigate and discuss the issue of whether these new migrants flow into the squatter settlements of the city. In other words, the main purpose of this study is to add to the understanding of socio-economic characteristics of squatter settlements and squatters, and their reasons for squatting or living in squatter settlements in Phnom Penh city.

On the one hand, squatting is not a problem as it provides hundreds of thousands of homes to the city's population, regardless of who they are and where they come from. On the other hand, it is a problem for the squatters, the authorities and to a lesser extent the surrounding communities because the living and housing conditions of squatter areas are poor or very poor, which can be hazardous.

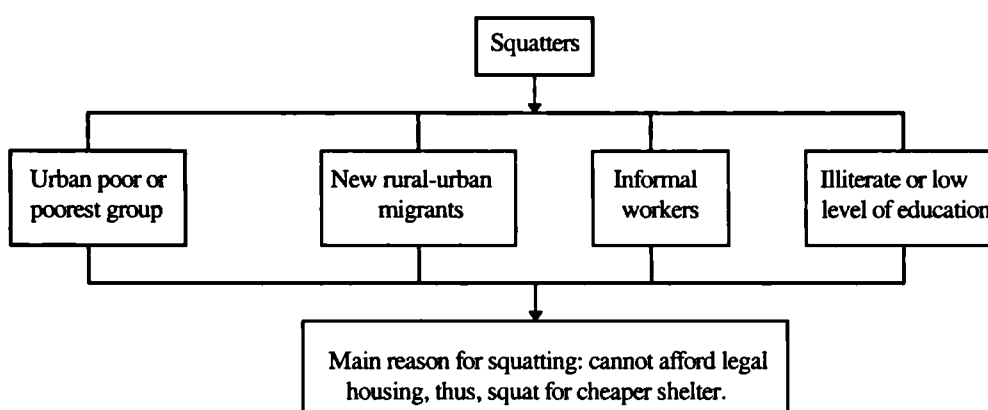


Figure1-1: The Main Conclusion on Squatters and Their Reason for Squatting in Most Literature.

- Theoretical argument:

In most literature² on squatter settlements (as further discussed in Chapter 2), squatters characteristically have a low income (or are poor), a low level of education, are low- or unskilled labourers employed in informal sectors, and are new rural-urban migrants (as shown in Figure 1-1 and later examined and discussed in chapter 2). Because of these disadvantages the reason for squatting or living in squatter settlements is believed to be the need for cheaper accommodation, since the majority of squatter dwellers are unable to afford housing in legal settlements.

However, in my own observation of the squatter situation in Phnom Penh city, the majority of squatters are buyers or tenants, while a small number of landlords invade the land and erect the squatter housing to sell or let. Most squatter landlords are not the poor. In contrast, they are high-ranking government officials, including police and military personnel, powerful businessmen and wealthy citizens. This is because the invasion of land is only possible with good connections with or a degree of tolerance by the authorities, where squatters either co-operate with or are influenced by the authorities.

The risks of eviction and confrontation are only affordable to those who are wealthy and powerful. Moreover, in a country like Cambodia where the ordinary population, especially the rural population, have for centuries experienced the power the authorities have over their lives, particularly during the Khmer Rouge regime³, invading land is a very risky action to take. In other words, it is unlikely that the city's ordinary population and the new rural-to-Phnom Penh migrants will invade the land in the case of Phnom Penh city.

However, in most literature on squatting in other developing countries, it is argued that by being new migrants, squatters have fewer opportunities to own a house in the city than their long-term and urban-born counterparts. Hence, they are more likely to become squatters than either the urban-born residents or long-term migrants. This is perhaps due to the perception that new

² The following discussion is not fully referenced since the full discussion of literature on the the subject of the study is provided in detail in Chapter 2. Thus most literature refers to those mentioned in Chapter 2

³ The trauma caused among the Cambodian population by suppression by the authorities is evident in many academic studies and is well known among the population (Sources: various Khmer-language newspapers and unprinted books and archive materials dated from the 1960s to 1997 at the National Library, Phnom Penh, Cambodia). It can also be found in an English-language newspapers - Phnom Penh Post, May 1999 and The Boston Globe, 12/14/99 (article by Adam Piore).

migrants earn lower wages than the urban-born residents or long-term migrants, who have saved and invested in city housing for longer. In other words, new rural-urban migrants are believed to need more funds to buy property in the city than urban-born residents or long-term migrants, who presumably have saved enough money to own property in legal parts of the city due to their period of stay.

Moreover, according to the general perception, legal housing in cities would be unaffordable to new migrants because they have already paid for transport from their places of origin and had had other necessary expenses after their arrival. They are also believed to be unable to find work at first. Hence, new migrants who are unfamiliar with the city are likely to look for a cheap place to live that is also convenient in terms of living with members of their original community and being close to work. The so-called squatter settlements meet these needs. In short, the literature seems to only strongly link squatting with poverty (a low level of income).

In my understanding of the issue, specifically in the case of Phnom Penh city, poverty or the level of income is not the only factor strongly linked to squatting. There are many other important factors, such as a preference of where to live and the opportunities to invade land for commercial purposes etc. Firstly, even if new migrants have the financial capacity to own land or houses in the legal settlements of a city, they might choose not to live there. This is because many of them plan to live in the city temporarily and will return to their places of origin.

Secondly, the new migrants, as described in most literature, do not have the time or funds needed to confront land owners and the authorities if their squatter settlements are threatened since they are believed to be too poor and too busy making a living. In fact, since squatting is an unstable investment, only wealthier members of the urban population can afford to risk losing it through evacuation and demolition by authorities.

Thirdly, both urban-born residents and new migrants can inherit land or houses in legal settlements from their relatives or friends. Thus, in this regard they have the same opportunities to live in the legal settlements. Along a similar vein, urban-born residents who are too poor to pay for legal housing have the same opportunities as new migrants to live in squatter areas. Moreover, the poor urban-born population and long-term migrants who own land or houses in legal settlements are

often willing to sell these properties and move into cheaper housing, often in squatter settlements. This happens when cash is urgently needed i.e. to open businesses, for medical treatment etc.

Nonetheless, the argument that new migrants are forced to squat or live in squatter settlements because they cannot at first find jobs in cities and are therefore unable to pay the rent for legal housing - not to mention buying houses in legal settlements - is rather blurred and too general. Many empirical studies have shown that migrants hold a very high rate of employment in cities. Turnham (1993,p. 45), for example, remarks that migrants hold a very low rate of unemployment - even lower than that of the urban-born population.

Unlike those who try to link migrants, urban unemployment and poverty, scholars such as Kannappan (1985, 88, 89), Turnham (1993), Long (1956) and Lubel (1991) point out that urban unemployment is rather related to the level of education, physical fitness and age of people. In his empirical study, Kannappan (1989) reiterates the idea that unemployment is low among migrants. It is often the physical fitness of people which bar them from getting jobs, regardless of their origin and length of stay in cities, as Turnham (1993,p.63) argues that "people are too old, too infirm or too young to work, so that the lack of or low quality of employment opportunities is only indirectly a source of their poverty".

Yet, many commentators argue that although migrants hold a high rate of employment in cities, their jobs are mainly in the informal sector of cities' economy. Such informal work generate lower incomes compared with jobs in the formal sector, which leads to the argument that new migrants cannot afford the cost of accommodation in legal settlements. Thus, squatting or renting houses in squatter settlements is inevitable for them. Again, this assumption is too general and in some cases invalid. Like in his early argument, Kannappan (1985) remarks that such a conclusion fails to supply enough evidence to support the view that wages in the formal sector are well above those in the informal sector.

In many cases, wages in the informal sector are also higher than in the formal sector. Lubell (1991,p.52), for example, points out that "estimates of incomes in informal sector activities have consistently shown that average earning of informal sector enterprise heads are higher (and sometimes considerably higher) than the official minimum wage or than the average wage in the formal sector". This is also found in Calcutta, India, where a study shows that among nearly

100,000 Muslim tailors in family businesses, their incomes were distinctly higher than that of other activities in the formal sector (Kannappan, 1989).

Neither is there enough evidence to support the conclusion that the informal sector is dominated by migrants. The data appears to be mixed (Jeffrey, 1988). Yap (1976) and Jeffrey (1988) both dismiss the idea that migrants earn less than native-born people, as they remark that income levels seem to be more a function of an individual's human capital endowments than of his/her migration status. Case studies of Belo Horizonte, Venezuela, and in urban Peru, for example, show that the widely expected association between migration and informal sector activity is rather weak. Mazumdar (1987) shows that in Belo Horizonte the proportion of native-born labourers in the informal sector was more or less the same as that of migrants.

Therefore, if the wages of the informal sector are not necessary lower than that of the formal sector, and if there is not enough evidence to support the idea that migrants earn less than the native-born residents, why are only migrants - and particularly new migrants - involved in squatting? What happens to the native-born residents or long-term migrants who are physically and financially weaker than migrants? Where do they live?

- Research Questions and Hypotheses:

Research Questions: All of the arguable points above encouraged this research to concentrate on squatting in Phnom Penh city. Within this focus I will attempt to address the following questions: Why do people squat? Are most squatters new migrants? If so why, or if not who are the squatters? Are they the poor, who cannot afford the city legal housing market? Or are they only the tenants of squatter landlords who are not the poor and who live in the formal housing settlements but squat for a commercial purpose? In short, the study aims to examine whether there is a relationship between squatting and the status of the studied population as presented in Figure 1-2 below.

Within this framework, the study will examine whether or not the four main socio-economic factors (including type of job, level of income, type and status of migrants) impact on the studied population's decision to squat and other issues. In short, the central research questions of this study are:

- Why is it that not all or even most of the poor living in the city squat and only a small minority do?
- Of the majority of Phnom Penh population that might be poor, how are the ones who squat selected?
- What are the reasons for squatting or living in the squatter settlements, knowing the risk of eviction or confrontation with authorities?

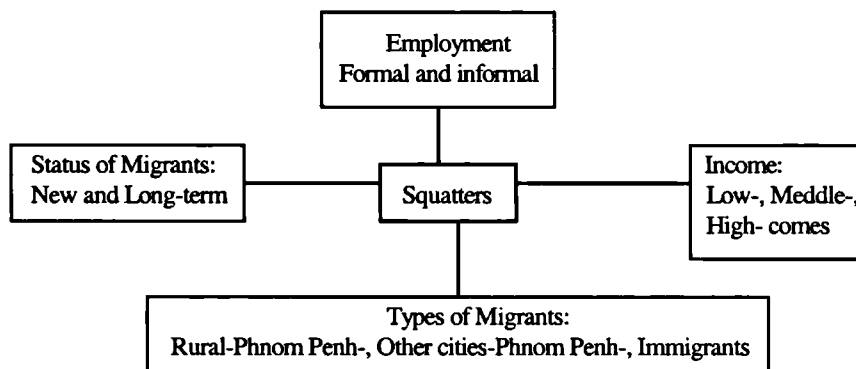


Figure 1-2: The Socio- Economic Characteristics of Squatters

Hypothesis: The socio-economic status of the squatter population influences their decision to squat or live in squatter settlements.

This is the central hypothesis, which can be divided into four specific hypotheses:

H.1: Duration of stay in the city contributes advantages in squatting or obtaining property in squatter settlements.

H.2: The poor do not have enough means to squat or to risk squatter eviction.

H.3: Low-ranking civilians and petty businessmen are not wealthy and powerful enough to risk squatting.

H.4: The search for cheaper accommodation is only one of the factors that contribute to the decision to squat or live in squatter settlements.

- Some Definitions of the Used Terms in this Study:

The term 'direct squatter' applies to those who invade, squat, grab land which contrast to the term 'indirect squatter' who only live in squatter settlements as buyers, rented tenants, etc. On the status of migrants in the context of this paper, long-term migrant refers to those who have migrated to and have stayed in the city for at least 5 years (before 1993). Hence, those who have migrated to and stayed in the city for less than 5 years and not shorter than six months are regarded as new

migrants. The main reason behind this division in migrants' period of stay is due to the major political changes in the country, which could affect movement of people, especially from the Thai-Cambodian border refugee camps into Phnom Penh before the election. The study also attempts to find out whether this movement affects the population in squatter settlements in the city as it could imply that squatting is partly caused by refugee repatriation (as discussed in Chapter 5).

For the level of income of respondents, the author acknowledges that it is very difficult to classify the norm or standard for high, medium and low income since employers often fail to comply with the minimum wage of US \$40 per month set by the government (BBC- Monitoring. Summary of World Broadcasts, 18-02-1998; Part 3- Asia- Pacific). However, according to a scan survey of various incomes of different types of the city's labourers and for the purpose of this study the norms will be as follows:

- High Income: This group refers to those who earn between 10,001 Riels and up to 30,000 Riels per day per family.
- Medium Income: This group refers to those who earn between 5,001 Riels and up to 10,000 Riels per day per family.
- Low Income: This group refers to those who earn less than 5,000 Riels per day per family.

Note: The local currency exchange rate at the time of the interview - December 1996 - was US \$ 1= around 2.700 Cambodian Riels.

It is also acknowledged that the term income can refer to many types: i.e. income from wages, income from leased properties, financial support from relatives, or remittance, etc. Therefore, in the context of this study, as many as possible of these income sources are included (Due to space limitations we could not provide an in-depth analysis, see Appendix II for the details on the income question). That is to say, not only the income from wages is considered in the determination of wealth, but property ownership is also included. For example, it is completely misleading to consider someone rich or poor only based on income from wages since some migrants might have several assets such as houses, land, motorcycles, livestock, etc., while the urban poor might own houses or land in the cities but face serious debt and other problems.

Moreover, the term family is basically calculated on an average of 5 persons per family. This means that if for example, if one family has 8 persons it will be classified as two families. By doing this, we will be able to avoid the problem of over- or underestimating the income of the family. For

example, if one family has only 2 members, all of whom are working then the family income will be much greater than in a big family, say of 10 members where only 2 are working. Although type of job is generally considered to be a main factor influencing income, among the majority of squatters and slum settlers this appears to have minimal impact on our study.

On the status of employment, the terms formal and informal are once again often differently defined by scholars. For example, according to the International Labour Organisation, the term informal sector refers to small scale, labour intensive, relatively easy to enter, lack of job security, free from union strife and government taxation, and low wages. However, for the purpose of this study, the two terms are used as follows: The term formal sector refers to businesses which pose high capital and skilled intensity, and employ more than 10 workers per establishment. In contrast, the term informal refers to low capital and low skilled intensity with fewer than 10 workers per establishment (See also Appendix II and III on how this issue was asked during the interviews).

1-2 An Overview of General Characteristics of Squatter Settlements in Phnom Penh:

There are two types of squatter settlements in Phnom Penh - on the rooftops of buildings and on the ground. Although the study focuses only on the latter, an overview of both types is provided as background information. As shown in Table 1.2-1, the majority (78 per cent) of squatter settlements have been built on land owned by the state and only 22 per cent are on private land.

Table 1-2.1: Squatter Population Distribution on Types of Land and the Problems Facing Different Types of Squatter Settlements

Type of squatter land	Number of families	Number of families who have faced evictions to date	Number of families who have faced flooding to date	Number of families who have faced fire to date
Privately owned (mainly vacant land for housing and commercial development)	6.470	1.611	4.318	519
Publicly owned (any)	4.848	1.348	3.595	1.281
Owned by a government institution (any)	7.300	5.012	4.597	3.211
Public land along railway tracks	1.767	61	858	0
Along public sidewalks	4.157	804	1.157	73
Roof-top public or private buildings	1.613	459	0	0
Public or private land close to rivers and canals	3.600	336	3.588	30
Pagodas	395	335	27	268
Total	30.150 (100%)	9.966 (33%)	18.140 (60%)	5.382 (18%)

Sources: Urban Sector Group and the Municipality of Phnom Penh, 1997

- Roof-Top Squatter Settlements:

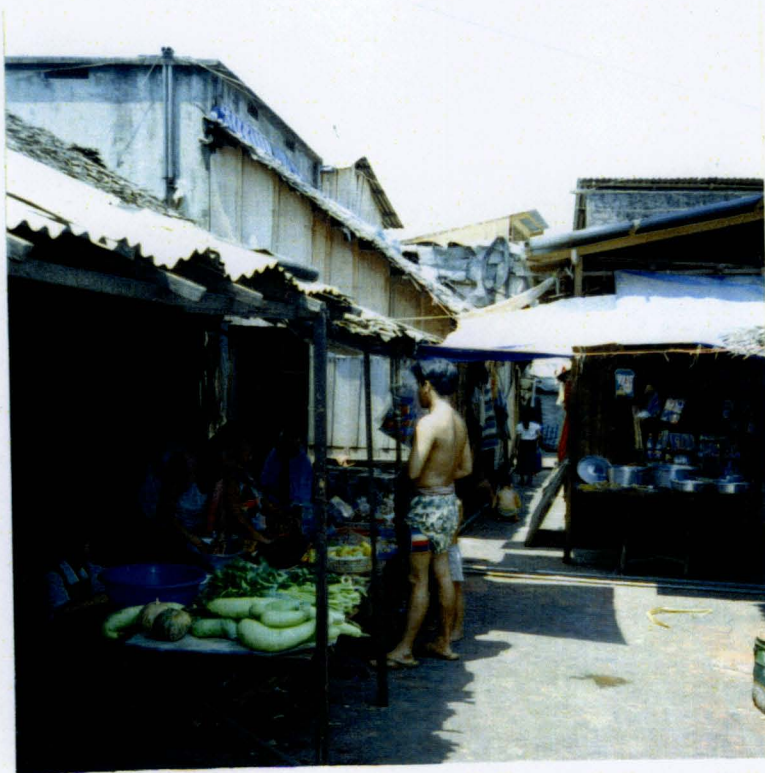
Most rooftop squatter shelters are built with lightweight materials such as wooden or bamboo pillars and reinforcements; roofs of thatch or palm tree leaves, zinc or cement boards; and walls of thatch, palm tree leaves or wood (See Photo-1). These materials are undoubtedly advantageous to the squatters as it is affordable and does not add too much weight to the already old structure. Some of these houses are technically unsound and the addition of another level should not be allowed. However, many squatter houses also have tile roofs and brick walls with concrete reinforcements, although structures of this kind are smaller and found less frequently.

Roof-top squatter settlements are generally less at risk of eviction than those built on the ground. A simple explanation would be that the shelters are located out of the authorities' sight. Also, according to the unstructured interviews with local authorities, most of these households are registered at local authorities as illegal or squatter settlements either for government statistical reports or for collecting taxes. The residents claim to have paid local taxes and the local authority thereby formally or informally allow the existence of these squatter settlements.

Photo-1: Typical Roof-Top Squatter Housing of Phnom Penh



Squatter houses built on the terrace of the fifth floor of buildings in the city centre (roof and walls from palm tree leaves, bamboo or wooden floor built higher than ground level).



Families of vegetables and grocery sellers in front of some houses of the above settlement.

Unlike squatter settlements in other cities of developing countries where structures were reportedly built and improved over a long period, the rooftop squatter structures in Phnom Penh are in a good condition. As shown in Table 1-1 and due to its good housing condition, this type of squatter settlements have never experienced fire Hazard before unlike those on the ground. At least the most important parts of these structures are built with high quality materials and other, less durable materials are added in time. Likewise, the construction was done by professional builders with or without the help of the owners' relatives and friends⁴. This again is in contrast to the situation in settlements in other cities of developing countries (see Chapter 2) where makeshift squatter houses are built with unskilled labour.

- Squatter Settlements on the Ground:

There are two main types of squatter houses on the ground: one where the living floor of the house is the ground and the other where the structure is built off the ground with as floor of normally bamboo sheet (bamboo strips used as wood, see Photo-2, 3 and 4). The first type is common in squatter areas where flooding is not a threat, while the last one is often seen in the areas prone to flooding, along the swampy areas and along the slopes of canals or riverbanks.

The majority of houses are still built with wood and thatch (see Table 1-2), and the better constructed houses are built with a mixture of wood, bricks, tiles, zinc or cement sheets. The owners of the better quality houses said they hired professional builders who were helped by relatives and friends. In contrast the huts were said to be built by relatives and friends without professional help. It is a Cambodian tradition for the owner to build the house without hiring anyone, but with the help of relatives and friends. This tradition is particularly found in the rural areas and is still valid in these squatter settlements. Even some widows who only had women relatives of working age told the author they erected the huts themselves without the help of men⁵.

⁴ All of this information are obtained form the interviews conducted by the author and friends with many old shelters in the Kim Song roof top squatter settlements during the field research in January, 1997.

⁵ This was obtained from the chart by the author with the women headed in squatter settlements of Boeng Salang areas and Steang Mean Chey Bridge area.

Table 1-2: Physical Characteristics of Housing Materials in Squatter Settlements in Phnom Penh City

Type of House	Number	Percentage
Houses built from bamboo, palm leaves and/or thatch	19,636	69
Houses built from wood	7,573	26
Houses built from brick and concrete	1,240	5
Total	28,449	100
Average size of houses	18 sq. m.	

Source: Compiled from UNDP/ODA and Municipality of Phnom Penh Report, January 1997

- History of the Selected Squatter and Slum Settlements:

As further discussed in Chapter 3, the three largest squatter settlements were selected for this study: the East of Phrea Mounivong Bridge squatter area, Bassac River squatter area, and Boeng Kak squatter area, as well as one slum settlement called the Boeng Salang settlement (See Map-1A & 1B).

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The East of Phrea Mounivong Bridge Squatter Area is in the Meanchey district of Phnom Penh municipality (See Map-2). The area is only about 5 km or less from the city centre and lies on the East bank of the Mekong Krom river. Perhaps for squatters the most attractive characteristic of the site is its proximity to the river and one of the city's large and famous markets, the Kbal Tnol market. This is very economical and convenient for making a living to its inhabitants since the majority of goods and agricultural produce are transported to and from the city and the country along waterways.

The area was only used as a temporary settlement before people moved into the city in 1979, and the size of the population perhaps fluctuated as some were successful in moving to the city (which was not that many⁶). Therefore, the government did not take any action against the inhabitants but also never recognised the settlement as legal. Only a few families have remained in the areas since their arrival in the city and the rest are all newcomers (This finding will be shown and discussed in other parts of this paper). Even though these people have settled there for even longer than some residents in non-squatter settlements, their rights as residents have never been recognised and they did not have any permission to live there. They are all regarded as squatters. Because some of these people have settled there so long ago (of course longer than the regime has been in power for, which is exactly the issue to the city authorities) they usually cite the length of stay to claim the right to remain there.

Vietnamese illegal immigrants found the riverbank even more convenient and economical than other places in Phnom Penh they had access to since the river was a route to their homeland, it provided a livelihood for the fishermen, and was used to transport goods traded into Cambodia or out to Vietnam. They also possibly did not need to sell their boats while settling in the inner city. It is also true that Vietnamese immigrants are aware of the possibility of being attacked by their former fighter comrades, the Khmer Rouges, and the possibility of repatriation by the anti-Vietnamese support parties.

These groups therefore choose strategically located places to live from where they could travel effectively to their country in such an event. That is why the area is dominated by the Vietnamese population, especially in the floating section of the East of Phrea Monivong Bridge squatter area.

⁶ As discussed early that during 1979 to 1989, not all the population were allowed to live in the city and only those who were employed by the government and their families were allowed to do so.

(See Table 1-3 for detail of the population distribution of each squatter community of the area). Officially, according to Table 1-3, the squatter area is divided into seven sub-administrative regions. The Table also reveals that the area dominated most strongly by Vietnamese is the union of Dam Chan village where they constitute the whole population of the sub-region.

Table 1-3: Recent Statistical Data on the Squatter Population of the East Preah Monivong Bridge Squatter Settlement

Name of squatter sub-areas	Phum Doem Ampil	Phum Prek	Phum Makleor 1 and 2	Phum Makleor	Phum Makleor	Phum Makleor	Phum Doem Chan
No. of families from Vietnam	0	0	46	17	15	85	863
No. of families from provinces in Cambodia	30	12	69	8	23	128	0
No. of families from other places in Phnom Penh	271	0	0	0	0	0	0
Total	301	12	115	25	38	213	863

Sources: Compiled from Statistical Report of Unpublished Paper on Meanchey District, ODA/UNDP Statistical Paper and Urban Sector Group Report, January, 1997

It is understood that there have been two dramatic increases in the squatter population of this settlement: the first occurring between the end of 1992 and early 1993 when all parties campaigned for the general election, and the second period between the end of 1995 and early 1996 which will be discussed and examined in the finding.

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The Bassac River Squatter Area is located in the Chamkamorn District of the Phnom Penh Municipality (See Map-3). This squatter area is the largest and most sophisticated in Phnom Penh and is located in the heart of the city, less than a kilometre from the national assembly and the Royal Palace doors. Therefore, the area faces more threat from the government than other squatter areas as it is always regarded as a disgrace to the city's image and the nation as a whole. The area includes land along the Bassac River banks, land opposite the Chamkamorn government palace, the Proyouvong pagoda premise, and the 'Building'⁷ Premises. It is obvious that the area's location and the size of vacant public and private land, including parks and playing grounds, are the most attractive features for squatters. They also enjoy a great deal of advantages since the area is close to most of the infrastructure and services available in the city.

It is officially divided into 26 sectors which are: union of T85, Chamkamom union, Bandos Vichea union, Proyou Vong Pagoda union, union of T87, union of T86, union of Bassac IA, IB, IIA, union of Dike I, II, III, union of Dey Kraham I, II, III, IV, V, union of the 'Building' Kiri A and B. Unlike other suburban squatter settlements of the city such as the East of Phreah Monivong Bridge, which was settled illegally since 1979 (as mentioned earlier), this area was only illegally invaded during the transitional period in the country between 1992-1993. This is because, as mentioned earlier, during the Vietnamese invasion and especially before 1987 those who were not government employees were not allowed to live or were at least discouraged to live in the city. Also, at the time most of the government employees were provided with sufficient housing and most vacant lands were occupied only by the government institutions.

⁷This " Building" is the name of the big and long apartments which was built during the 1960s and it has been called as " Building" ever since .

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Perhaps the most expensive sub-settlement in the city is the Bassac sector, which is located along the Bassac river opposite the National Mohoushrap Theatre and next to the ex-Soviet Embassy complex. Prior to 1990 this sub-settlement was vacant and many families used it without authorisation for family cultivation. The land was sold to a private company in 1991 which proposed to develop a commercial centre or luxurious hotel complex. These plans, however, never materialised and squatters gradually occupied the vacant land.

The other parts of the Bassac squatter area are vacant public land intended as parks, playing grounds and the land surrounding the Buddhist Pagoda. Except for the land surrounding the monastery building in the Buddhist Pagoda premises, the land in the area was mainly squatted between 1992-1993 when the authorities were preparing for the general election. The government authorities of the time before the election and the establishment of the state of Cambodia, complained that the dramatic increase in the number of squatters in the area was mainly the result of the propaganda spread by political parties promising that squatter areas will be recognised or the land exchanged for alternative plots (author own observation).

In some cases, political parties even promised to build a new city for the squatters. The most significant encouragement to squatters was the public announcement made in 1996 by the second prime minister⁸, Hun Sen, who said most squatters should not leave the invaded areas if each family does not receive thousands of US dollars as compensation. This speech was publicly broadcast and published in most media in the country which leaves no doubt that the squatter population increased dramatically thereafter. Subsequently, vacant public land like parks or playing grounds were flooded with squatters (interviews with local authorities: 1996). Those areas were what is now known as the Chamkamorn union, Dey Kraham area, Bandos Vichea union, union of T85, T86, and T87, and some areas of the Bassac union.

It is sad but true that the new democratic policies adopted by the coalition government since 1993 have led to some confusion, disorientation or manipulation. An example is those little educated people who wrongly use the right to settle on vacant lands or build on either public or private property (H. E. Kry Beng Hong, 1993). In addition some powerful individuals, especially those in

⁸ There were two prime ministers in Cambodia after the national election of the country in 1993. The first prime minister - Prince Norodom Ranarid was from the narrowly win partly in the election and the second was from the narrowly lose party which used to rule the country after the collapse of the Khmer Rouge regime.

the military or police force, are involved in squatting land, dividing it into smaller plots, and building rooms or huts which are let or sold for profit (Interviews with experienced personnel: 1996).

Table 1-4: The Population Distribution of Each Sub-Area of Bassac Squatter Area

Place of origin Name of Sub-Area	Another area in the city	Rural area	Refugee camps	Vietnam	Military discharges	Total
T 85 Community	36	36	72	0	36	180
T 86 Community	0	391	0	0	0	391
T 87 Community	0	180	0	0	0	180
Chamkamorn Community	0	433	0	0	0	433
Bondos Vichea Community	0	513	0	0	0	513
Proyou Vong Community	0	268	0	0	0	268
Bassac IA Community	0	89	0	0	0	89
Bassac IB Community	0	196	20	0	0	216
Bassac IIA Community	0	240	27	0	0	267
Bassac IIB Community	0	70	39	20	0	129
Bassac IIIA Community	0	182	0	0	0	182
Bassac IIIB Community	30	60	0	62	0	152
Bassac IVA Community	16	62	12	0	0	90
Bassac IVB Community	0	104	0	0	0	104
Bassac VA Community	0	15	135	0	0	150
Bassac VB Community	0	56	0	24	0	80
Dike I Community	0	210	0	0	0	210
Dike II Community	0	356	40	0	0	396
Dike III Community	0	58	4	0	0	62
Dey Kraham I Community	0	145	0	0	0	145
Dey Kraham II Community	0	54	6	60	0	120
Dey Kraham III Community	0	116	10	10	0	136
Dey Kraham IV Community	0	79	13	39	0	131
Dey Kraham V Community	0	80	35	0	0	115
Building A Community	0	74	7	54	0	135
Building B Community	0	129	8	0	0	137
Total	76	4,196	428	269	36	5,011

Sources: Compiled from Statistical Report of Unpublished Paper on Meanchey District, ODA/UNDP Statistical Paper and Urban Sector Group Report, January, 1997

It is also undeniable that such activities would not been viable without the local authorities benefiting from it, and some officials have plots in the squatter areas where their names may or may not be registered. It is noted that only a small number of Vietnamese families live in this area while the majority of the population are Cambodians from various part of the country (as shown in Table 1-4 above).

The Boeng Kak Squatter area is in the Daun Penh District of the Phnom Penh Municipality (See Map-4). Boeng Kak is also located in the heart of the city and was named after the lake in the centre of the area. Before 1993 the area was an amusement park for public use with wildlife zoo, boat trips, some gambling establishments and shops, well equipped playgrounds, restaurants and

dance club, etc. As shown in Table 1-5, all the population of this settlement in 1997 was Cambodians.

The land officially belongs to the municipality of Phnom Penh. Most areas were squatted during 1993, before and after the general election. The population has since increased rapidly, particularly between 1995 and 1996 (Interviews with experienced personnel: 1996). The history of squatting in the area is no different from many other squatter sites in the city. It starts with a few families moving in and followed shortly after by the area filling up with new arrivals. During the early invasion the local authority attempted to evacuate squatters, who armed themselves to resist the action. Eventually, squatters remained in the area since most of the squatter landlords were government military and police commanders (Interviews with local authorities: 1996).

Table 1-5: Population Distribution by Places of Origin in Boeng Kak Settlement

Place of origin	Rural areas of Cambodia	Refugee camps	Military discharge	Total
Number of Families	360	45	45	450

Sources: Compiled from Statistical Report of Unpublished Paper on Meanchey District, ODA/UNDP Statistical Paper and Urban Sector Group Report, January, 1997

The area is one of the most developed squatter settlements in the city with luxurious concrete-built hotels, restaurants, villas, flats, etc. Most of these properties also belong to high ranking officers in the military, police and government as well as influential businessmen. (Interviews with experienced personnel: 1996). Low-price guest houses is a feature of the area and attract local residents, foreign backpacking tourists and some foreign businessmen.

Image removed due to third party copyright

The Boeng Salang Slum Settlement is in the Toul Kork district of the Phnom Penh municipality (See Map-5). It is located in the suburbs of the city and the land was mostly vacant with some vegetable gardens before the 1990s. The area was reserved for residential use and most of the road infrastructure was already in place, although unpaved and in poor condition. Squatters invaded some parts of the area, particularly the land along Stung (canal) Meanchey where the canal is obstructed by huts, causing flooding in the city. This slum settlement covers a surface of 199 hectares and the population is 5.027 households (around 32.128 inhabitants with a density of around 162 inhabitants per hectare)⁹.

However, most parts of this settlement are legally occupied with the approval of the government authorities. The sample population to be interviewed for this study was chosen within the legal parts of this area. It is called a slum settlement because of the poor condition of the road system, housing and services in the area. Also, the majority of the residents are believed to be poorer than those who live in the legal settlements of the city, if not the poorest. As said earlier, most parts of the area were only developed after 1989 when private property was legally recognised and guaranteed.

⁹Source: Received from H.E. Kry Beng Hong-Vice governor of Phnom Penh municipality, 17 November 1997

Image removed due to third party copyright

- Physical Characteristics of the Studied Squatter and Slum Settlements:

East Preah Monivong Bridge Squatter Settlement: The physical characteristics of housing in this squatter area are generally better than in the Bassac River area (See Photo-3). According to the interviews with residents of both settlements, the improved housing of this area is because of less threat of eviction than in the Bassac River area. However, the situation is different in some sub-settlements of the Preah Monivong Bridge, especially along the riverbanks where small houseboats (boat huts) are crowded and where the land is subjected to natural erosion or sliding caused by the river. Houses in these sub-regions are small, dilapidated and at risk of fire.

Photo-2: Squatter Housing of the East Preah Monivong Bridge Settlement



Some squatter boats and floating houses along the small Bassac River (Tonle Bassac Touch) which are mostly owned by the Vietnamese immigrants.



Some squatter houses (which are built on the ground) along the small Bassac River bank.

Many sub-regions of this squatter settlement face flooding from the adjacent rivers and lakes. Those houses illegally built on hazardous slopes are indeed of a low quality and the inhabitants are mostly poor families. In this case, the lack of land tenure is not the main cause of the poor housing condition as argued in the literature (Turner 1969, 1970,...), but the limited finances and geographical location are the main causes.

At the same time many houses built illegally some distance from the river are of a higher quality and in better condition. Many of these houses are concrete-built apartment buildings or restaurants, guest houses, or wooden houses with tile roofs and concrete pillars, or wooden houses with zinc roofs. The majority is still the lower quality wooden or bamboo houses with thatch roofs as commonly seen in other squatter areas of the city. House sizes vary from one sub-settlement to another. The average size is similar to in the Bassac area, which is around 20 sq. m to 25 sq. m. This area is, however, generally less crowded than the Bassac river squatter area.

During severe flooding most houses in these areas are temporarily uninhabitable and have to be evacuated, a situation these residents face most of the rainy season. It was said during the interviews that many families have moved their houses several times within the area because of flooding, land erosion or landslides. It is indeed in these sub-settlements that houses are in the worst condition compared to those in other sub-settlements in the same region, or in the squatter settlements in the whole city.

Bassac River Squatter Settlement: Most of the dwellings in this area are built with palm tree leaves, thatch and bamboo, with only a small number of houses constructed from wood and zinc (See Photo-2). It is understood that this squatter area has been under great threat from government authorities since its establishment. Before the general election in 1993 the then government authorities made at least two attempts at eviction. Therefore most squatters had never felt confident with investing in their dwellings even if they have the means to do so.

The huts' sizes vary and perhaps depend on the land available to individual families. However, at the time of this survey (September, 1996 - January 1997) few vacant plots were available on offer and the common size of the huts was 4m x 5m = 20 sq. m. This is bigger than the average size of a squatter house in the city, which is only 18 sq. m according to data obtained from the ODA/UNDP in 1997 (see Table 1.2-2).

In the past and was told by the interviewees during the field survey that houses can be built in a matter of hours, especially during times of serious confrontation with authorities for example just before the election in 1993. Hundreds of huts in the area were erected overnight when police and soldiers failed in guarding the area from intruders. Squatters were able to build their huts in such a short time because they had prepared all the necessary structures and materials beforehand in the surrounding areas. This is a special technique squatters employ in response to confrontation.

Photo-3: Squatter Housing of the Bassac River Settlement

Squatter houses built on the dike along the Bassac River (roof and walls from palm tree leaves, bamboo or wooden floor built higher than ground level).



Squatter houses of a better quality (wooden with corrugated iron roof) built along the public roads and in the public gardens along the Bassac River bank.

Boeng Kak Squatter Settlement: The area is one of the most densely populated squatter settlements in the city and also one of those most at risk of eviction. However, in contrast to Bassac river squatter area, houses in Boeng Kak are in a better condition and in some areas houses are in a better condition than those in legal settlements of the city (See Photo-4). Even the houses in this area in the worst condition is better than those found in other squatter areas. The average size of the houses is similar to those of the above two squatter settlements which is between 20 sq. m and 25 sq. m. It is true that these relatively small houses are few when compared to other squatter settlements in the city where some buildings are bigger than 500 sq. m, particularly to the north and the north-west of the area.

Photo-4: Squatter Housing of the Boeng Kak Settlement



Low-rent hotel (with yellow sign board), restaurants (next to the hotel) and the luxurious hotel being built (at the far right) in the Boeng Kak squatter area.



Some squatter houses of a poorer quality which are built over the edge of the Boeng Kak lake.

Boeng Salang Slum Settlement: The housing condition in this slum settlement varies from place to place. In general, the houses are in a better condition than those in the squatter settlements. However, this study choose only those slum settlers whose housing conditions were similar or worse than that of the squatters. This is because this study needed to cross-check the reason of slum dwellers for not squatting or for planning to squat, or vice versa, if they are as poor as squatters.

Geographically, the housing condition of the area seems to distinguish two main characteristics. The bigger (more than 50 sq. m), better quality houses built from durable materials and decorated are seen along the main arteries to the area. In contrast, the small huts of a lower quality line the smaller paths in a worse condition, the sewage canals in the inner areas and the lake (See Photo-5)

The better quality houses are in a similar condition to the houses of the middle and high income households as seen in the city centre and other parts. These are concrete multi-storey

apartments buildings, detached houses, etc. The houses of lesser quality, or huts, are in a similar condition to those in squatter settlements. The average house size in squatter settlements is between 20 and 25 sq. m. Since the area's main road network was laid out earlier, access to houses are better than in squatter settlements, although this could be arguable in the case of the inner areas.

Photo-5: Slum Housing of the Boeng Salang Settlement



Some houses which are built over one of the city's open sewer canals.

1-3 An overview of the Cambodian context and in particular Phnom Penh City, on urbanisation as the result of the political changes of the Country (Before 1979):

The absence of documents and other relevant information and data on land and housing in Cambodia and Phnom Penh lead to unrepresentative research in academic fields. Hence, this section provides a brief history on urbanization and development issues of the city and the country to enable a better understanding of this study's background.

- The early time Cambodia (Before 1970): Cambodia and her people (the Khmer people) are well known to the world for their unsurpassing ancient heritage. This is despite the unique ordeals Cambodians have been subjected to as a result of destructive civil and foreign invasive wars, especially under the brutal regime of the Khmer Rouge (known as the Cambodian Killing Field). The Angkor Wat complex, which was built as early as the ninth century, was the beginning of the building process in the country.

The Khmer empire eventually reached its zenith during the reign of the great Khmer Emperor Jayavarman VII (1181-1219), who then ruled a large and powerful country as stated by Herz (1958, p.28): "At its height, the Cambodian empire included not only today's Cambodia but Cochin-China (the now south Vietnam) and Annam (most of north Vietnam), most of Laos, almost all of today's Thailand, and perhaps also a portion of Malaya and Burma". The magnificent Angkor Wat complex, which remains until the present day, is a symbol of an earlier, highly civilized and well urbanized society (Jones: 1995, p.169).

Evidence by some research scholars reveal that during this glorious period health care to ordinary Cambodians (one of humans' most important needs) was well established. Ghosh (1968, p.7) states that "as early as the twelfth century Cambodia had established a system of medical assistance for people in general, when the forerunners of modern western nations had no medical science worth the name, and the care of public health was beyond their conception". In addition, Herz (1958,p.27) and Ghosh (1968,p.7) found that the empire already had more than 100 hospitals during the ninth or tenth century.

During the period 1884 to 1953 when Cambodia was under the French colonisation, the French paid little attention to urbanizing and developing Cambodia, except from building some luxurious

housing for their own employees. It is also a bitter fact for the Khmer people that the French wrongly gave the then Cochinchina region with the city of Prey Nokor (as it was known in Cambodia, but also known to the Vietnamese as Saigon and now Ho Chi Minh city) to the Vietnamese government .

Another point worth mentioning to further illustrate the negative process of development and urbanization of the kingdom during the French Protectorate period is that many of the problems now facing the capital Phnom Penh city (which was only the main city in the kingdom during that time) result from that time. These inherited problems include ineffective sewage systems, insufficient dikes (which are used to prevent flooding due to a rise in the Mekong river's level during rainy seasons), and importantly, a corrupted and ineffective governing system.

Phnom Penh, which was founded and established by King Ponhea Yat after the fall of Angkor (around 1431), was not the permanent capital of the kingdom until 1863 when King Norodom moved into Phnom Penh from the previous capital city of Oudong - about 60 km south-west of the former. In its early days, the city was rather a centre of huts and a floating wooden shanty town apart from the Phnom¹⁰ monastery and perhaps the important royal estates (Munson et al: 1968; Igout: 1993). The city was fully developed during the Sangkum Reast Niyum of the then Prince Norodom Sihanouk in the 1960s and enjoyed a remarkable reputation as Paris of the Far East or pearl of South East Asia (Igout: 1993). Unlike other cities of other countries, the city has experienced a unique population changes since its creation.

The population of Phnom Penh city, due to many reasons such as changes in the country's political situation, had increased from 355,000 inhabitants in 1958 to 394,000 inhabitants during a time of peace in 1962. It then rose to around 900,000 in late 1969 before the then prince Norodom Sihanouk's Sangkum Reast Niyum was toppled (Igout 1993), to around 1.5 millions in early 1975 during the American war in Indo-china (Kry Beng Hong et al: 1973), to only a few thousands between 1975 and 1979 during the Khmer Rouge's reign (H. E. Kry Beng Hong, 1993)¹¹. It

¹⁰ In Khmer language Phnom means hill, and in the case of Phnom Penh, the hill is men-made dated around almost 600 years ago. The name Phnom Penh is devoted to the widow who named Penh and who led people to build that hill and monastery on the top of the hill.

¹¹ Compiled from "the Report on General Situation of Phnom Penh City" of H. E. Kry Beng Hong prepared for a seminar at a Phnom Penh urbanisation training programme held in Phnom Penh 13, 14, and 15, January, 1993 and sponsored by Phnom Penh municipality and Paris Municipality.

increased again to around 1 million in 1996 (the author's own estimation based on the previous year's statistics). The drastic political changes during the late 1970s, 1980s and 1990s affected the urbanisation and development of the city as well as land and housing ownership of its population, which is discussed below.

- The Impact of Political Change on Phnom Penh Urbanization and Development During American Indo-China War (Between 1970-early 1975): In this period Phnom Penh experienced a higher level of population growth than ever before. The city's population increased from 600,000 in 1969 to 1,200,000 in 1972 (of whom approximately 800,000 were refugees) and to 1,500,000 in the beginning of 1975 (Kry Beng Hong *et al*, 1973). The city was a shelter for migrants, most of whom fled civil war in the countryside. The government, with the largest share of the budget allocated to the military, could not do much in especially the supply of housing to meet the high demand resulting from such rapid population growth. However, in the early years of this period, the state managed to develop some pieces of land and sold it to people at a subsidized price. According to the report of H. E. Kry Beng Hong¹², two main dikes were built. The first reclaimed 800 h.a. of land in 1970 followed by 6.400 h.a. with the second dike in 1972. This was the only credible development project of this period.

To worsen the situation, the problems relating to the already inadequate and ineffective housing, infrastructure and other services of the city were further exacerbated by this massive influx of newcomers. As Kry Beng Hong *et al*, (1973, p.8) argue: "Vacant lands in and around the city boundaries have been invaded by people who need shelter. Squatting has been going on at a large scale. About 20 per cent of city dwellers live in severe slum conditions." It was at that time that the government land and housing policies and regulations as well as land ownership were put aside or violated by the new comers in need for shelters. Squatting was obviously the need for necessity from which both authorities and land owners felt sympathy toward squatters; and thus allowed them to settle on their land (although temporarily as they thought)¹³.

Correspondingly, any urbanization and development programmes the then government had planned before the civil war was abandoned under the circumstances, including slum and squatter

¹²Compiled from the Khmer language report on the general situation of Phnom Penh city which H.E.Kry Beng Hong wrote in preparation for the seminar called Phnom Penh Urbanization Training Programme held in Phnom Penh January 1993

¹³ Sources: From unstructural interviews with many aged experienced professionals

clearances, the plan to build a new dike to reclaim between 5000 and 8000 hectares of land, and other housing programmes in the suburbs. According to the same study (Kry Beng Hong *et al*, 1973) only 250,000 of the total of 800,000 newcomers at the time were able to accommodate themselves. Of the remaining 550,000 newcomers, the study found around 200,000 squatted in the city and around 350,000 shared houses with relatives or friends in extremely overcrowded conditions. Moreover, this situation worsened when the civil war became critically fierce in the rural areas and spread close to the capital.

- The Impact of Political Change on Phnom Penh Urbanization and Development During the Khmer Rouge of Pol Pot Regime (Between 1975-early 1979): This period was the year zero for Cambodia in terms of urbanization and social culture. Luxurious buildings, schools, universities, hospitals, churches and pagodas of all religions and other services were regarded as the symbol of feudalism and imperialism (Vickery, 1984). Of the city's 122,000 houses (including concrete buildings, wooden structures with tile roofs and wooden structures with thatch roofs) before 1975, only 40,000 remained after 1979. Therefore, within 3 years, eight months and 20 days of the Pol Pot regime, 82,000 dwellings were destroyed through demolition or neglect (H.E. Kry Beng Hong, 1993). As a matter of course many of these buildings and services were destroyed while others were purged and left to be destroyed by the weather. The city's population, as mentioned early, was forcefully evacuated to rural areas and only a few thousand of the then Khmer Rouge officers and employees were allowed to live in Phnom Penh (H. E. Kry Beng Hong, 1993).

Maintenance of the city's roads were almost abandoned by the new administration with the exception of those the around less than 10,000 Khmer Rouges used mainly for spreading their propaganda to the outside world or by Chinese delegates visiting the country. Consequently, most of the paved roads dried out, cracked and were eventually destroyed by the weather. Roads with red gravel surfaces became muddy and eroded during rain and flood. Some roads were completely stripped by the Khmer Rouges and the land used for vegetable gardens. Likewise, the water supply and sewage systems were destroyed or left to be ruined by weather and neglect. River water was allowed to flow into the city's sewage system regardless of the river's high water level during the rainy seasons, causing the silting up of all drainage systems and constant flooding.

In summary, between 1975 and 1979 Khmer Rouge leader Pol Pot told journalists "Cambodia today is a land without universities", to which Barron and Paul (1977,p.208) added "its also a land

without cities, commerce, art, music, literature, service or hope". Since only a few thousand Khmer Rouge workers were allowed to live in the city and private property of any kind was abolished, Phnom Penh faced neither squatting nor development but destruction.

1.4 Recent Housing Situation in Phnom Penh (1979- 1998):

Housing in Cambodia has, perhaps since the beginning of its history and even in the period of the great Khmer empire between 9-th and 14-th centuries, been solely the responsibility of the people themselves. This lack of housing responsibility of the state toward its people was possibly due to the fact that traditional Cambodian houses were simple constructions which did not require excessive financial and material resources. Most of the population lived in rural areas where materials for building such houses were locally available at affordable prices or without charge if families had a large enough work force to collect it from the surrounds.

In addition, self-help housing with very strong community participation has been a tradition of Cambodian people, although this ethic almost completely disappeared during the Khmer Rouge regime (1975-1979). Most of the population live in the countryside where access to land for housing has not been a problem for most 95.1 per cent of the population own land and house (owner occupied) in the country in 1996 (General Report: 1996). These factors reduce the problem of inadequate land to house the general population or even for cultivation, as happens in other societies where the land is owned by a small number of rich and powerful families (Feder et al: 1986, Khosa & Ballard: 1996).

However, unlike in the rural areas, it has become a real challenge to house the poor in cities and particularly in Phnom Penh where only 92.6 per cent of the population own houses (General Report: 1996). This is because land prices are out of reach of the majority of the city's population (according to the study of UNTAC¹⁴ the price of land and house rose between three to four time from 1990 to 1993, and around five times from 1989 in Phnom Penh). Although land is not in short supply in the city the problems seem to be one of management and financial mobilization due to inefficient governmental bureaucracies, as well as the manipulation of the property markets by land speculators.

¹⁴ UNTAC- United Nation Transitional Authority in Cambodia. The report was done by their staff in Phnom Penh in 1993.

- Land and housing situation between 1979 and 1989:

After the collapse of the Khmer Rouge Regime and from 1979-1989, all property remained in the hands of the state. The Vietnamese-backed regime, the People's Republic of Kampuchea, did however allow people to move back to the cities and re-occupy empty buildings and land, except those reserved for government utilities. At that time, it was impossible for the state to start any housing programmes for lack of finances. Most of the state budget and foreign aid was spent on food and medical facilities and the rehabilitation of infrastructure and public services. There was no commercial property market and were no private companies involved in the land and housing market, since they were discouraged by the then communist regime's policies.

At the same time, all land and property ownership of any kind before 1979 (before the Khmer Rouge regime) were declared void by the then government (See also appendix -1). No one could claim ownership to any property that belonged to him or her before 1979. Before June 1989, all land and housing belonged to the state and the population only had the right of residence and perhaps maintenance. Property was more or less evenly distributed among most of the population in the country. Those who were allowed to settle in the city were required to register with local authorities and were directed to live in houses and areas according to their jobs. This form of population distribution was, of course, designed by the then communist regime to strictly control from the so-called enemies of the state, such as anti-Vietnamese infiltrators CIA spies, etc)

It is noticed that during this period¹⁵ not everyone was allowed to settle in Phnom Penh and other cities of Cambodia, but only those who were employed by the government and their relatives. The main reason was perhaps the preoccupation with urban unemployment and the shortage of food, since the country had no money after the fall of the Khmer Rouge regime. Therefore, most of the population were encouraged to cultivate land in rural areas. Those who were allowed to live in the city were all offered free accommodation, mostly flats or houses, leaving much land unoccupied or used only as vegetable farm (only family gardens and definitely not for commercial farming, since the state practised collectivisation policies at the time). Therefore, only government institutions were allowed to occupy most of the large (more than one plot for housing) vacant sites.

¹⁵The following discussion is based on a collection of unprinted papers in Khmer languages and the informal interviews with local authorities

- Land and Housing Situation Between Late 1989 - 1998:

As shown in Appendix 1¹⁶, in late June 1989 the government issued a sub-decree that recognised and guaranteed individuals' right to own private property, based on the principle of whoever settled on a property would automatically own that property. All the occupied properties were officially recognised by the government as private property that the inhabitants could pass on to their children, trade (although at first this was not encouraged), exchange etc. with a guarantee from the state.

In theory, because of this situation, all Cambodians owned property (land and/or houses), unlike in other countries. Therefore, at that early period squatting did not yet exist (further discussion is provided in the next section). The main requirement for claiming the property was a registered letter from the local authority from the time the property's occupiers first settled in the city, town or village. The law applied not only to individual civilians, but also to government institutions that could claim the right to own property on the same basis.

In the case of individual families, the owner or occupier had to apply for the right to own property through the local authorities. The municipality of Phnom Penh finally approved it (at that time it was known as Phnom Penh People's Committee). In the case of government institutions, they did not need to go through the local authorities but only had to obtain approval from the ministry it was under before the application was approved by the municipality. The law also stipulated that only the head of the household (normally the eldest and employed by the government) was allowed to claim the property right with the consensus from all the family members.

In the case of property sharing, the property had to be claimed by all the heads of the families who shared that property. However, it also allowed each family to claim separate property rights, based on the proportion owned by each family. It is noticed that before 1989, individual families were not allowed to occupy more than one plot of land or one house or flat. The problem of the ownership of large properties, therefore, only developed after that period, say from 1990, when the government adopted free market economic policies that reached a critical point in the late 1992 and continues today (Further discussion is provided in the next section).

¹⁶ The discussions that follow are based on the same source and the informal interviews with local authorities

1. 5 The Function of Housing Markets in Cambodia and in Phnom Penh:

Housing in Phnom Penh city and in Cambodia as a whole functions rather differently from most other countries (See Table 1-5.1 for the case of other developing countries). Generally, land or houses are brought into service by four main forms: buying or selling (legally¹⁷), renting (legally), inheritance or provision by the government to employees, and squatting, including illegal subdivision of land or housing (See Table 1-5.2). During the past decades most houses or land in the city, however, circulated in the markets in the form of buying or selling and squatting due to the mentioned civil wars in the country, which had the greatest impact on squatting.

¹⁷ The term legal here is applied to the property which is put into service through legal market with the fulfilment of the government procedures, otherwise such an activity is regarded as illegal or squatting.

Table 1-6: Characteristics of Housing Supplies System in Developing Countries

Sub-system	Producers	Finance	Source of land	Scale of Scheme: Type of Unit	Users
State	Ministry of Housing, Autonomous Agency, Welfare Department, Planning Department, Ad hoc Agency	Budget allocations, earmarked funds, soft loans	Inherited, expropriated, purchased	Large: multifamily, standard design, community housing	Civil Servants, Supporters, displaced populations
Private Institutions	Employers, Pension Funds, Churches, Charities	tax relief, savings, endowments, donations	purchased, endowed, gifts	varied: single and multifamily, standard design	employees, depositors, selected beneficiaries
Private Commercial	Commercial Banks, Savings banks, Pension Funds, Land Developers, Construction Companies, Real Estate Agencies, Rich individuals	Commercial loans, mortgages	Purchased	Varied: mostly single family units, varied styles, exotic	those able to raise cash or obtain a mortgage
Illegal	Small landowners or developers, Artisan builders, Poorer individuals	personal savings, self-help	inherited, purchased, seized	varied: single family units, form evolves with time	self-selected, usually poor

Source: Lowder (1987, p.13)

Table 1-7: Characteristics of Housing Supplies System in Phnom Penh

Sub-systems	Suppliers	Sources of fund	Source of land	Scale of scheme: Type of unit	Users: Type of population
Buying (legal)	Private firm/family	Personal wealth/saving	Purchased/inherited	Vary	Mainly better off group
Renting (legal)	Private firm/family	Personal wealth/saving	Purchased/inherited	Vary	Mainly low income
Inherit/provided	family/government	Personal wealth/saving	Purchased/inherited	Vary	Any
Squatting	family/govt.officers	Personal wealth/saving and self-help building	Purchased/inherited and invaded/seized	Vary depended on types of squatters	Any

Source: Author own observation and from unstructured interviews with many experienced personnel

Government housing policies in the city also have a great impact on property prices. It is inappropriate for one to conclude whether or not, and how the authorities should be involved in land or housing markets since it is a specific issue requiring intensive study. However, the recent housing and zoning regulation on aesthetic and physical dimensions (size of a plot, the height and size of a building, etc.) has an adverse impact on the price of land and its capacity of uses. For example, land in the city centre is most expensive but the capacity of land use, in contrast, is lower than compared to land in other locations (author own observation). Hence, many vacant plots in the city centre remain undeveloped because the owners are unable to build at a profit while adhering to the regulations. Such impractical policies and regulations are also the contribute factor to the growth of squatter settlements in the city as later discuss in Chapter 6.

It is common that the supply of land or housing depends on the demand of the markets, but other factors such as the political and economic situation of the country, the cost of imported housing materials and the mentioned government housing policies also have an impact on the demand and supply of land or housing. This explains why these markets have changed over time, especially from one regime to another. Furthermore, there seem to be two main forms of regimes which have different impacts on such markets: the central market economy of the communist government and the free market economy of the liberal government.

In the first form of government, land or housing is a function of the state which is regarded as non-commoditised or non-exchanged goods. Land or houses are considered state property and the population only have the right to live in the property (as mentioned early). The state also has the right to expropriate such property from its employee or the residents at any time for any reasons deemed necessary. Hence, the state controls the supply of land or houses, and to a lesser extent the demand in the form of government migration control policies which strictly control population movements from rural areas to cities.

Under the second form of government, most land and housing markets are largely managed by the private sector and individual land or house owners and to the far extent, by the government (See table 1.4-1). Properties are regarded as commoditised and exchangeable goods. Land or houses are freely bought, sold, resold and passed on from one person to another with recognition from the state. In this situation the demand for land and houses in the city are never satisfied by the supply markets. This is not because the demand is too high or that adequate land and houses in the city

cannot be provided, but because the majority of population are low income households who cannot afford prices of land or houses on offer (Main et al: 1997).

As UNCHS (1996, p. 109) reports, “a third to half of the nations’ urban population or a city’s population have incomes too low to meet human needs. National studies in several of the poorest African, Asian and Latin American countries suggested that more than half of the urban population are below the poverty line”. Yet, this figure is also claimed by the same report as far below the reality. As a result, this majority turns to other markets, including high-density house shares with families and friends, buying illegally sub-divided plots or houses and boldly squatting on vacant land or in empty houses. These markets are unfortunately also the only alternative for the majority of homeowners who need hard cash quickly. This also contributes to the reason for squatting or living in squatter settlements for many squatters, as later discussed in Chapter 6.

After 1989 and according to the Cambodian constitution, anyone except foreigners can buy land or houses, develop and resell it. Land and housing prices are set freely by the owners with little or no intervention from the government. In Phnom Penh, the municipal government only monitors architectural and engineering plans, and approves and issues land or building tenures to property owners. The disadvantage of the government's ability to involve itself in such markets¹⁸ lies in the fact that there are no limitations to prevent speculators demanding unreasonably high prices for land and houses in the city. In fact, land and housing prices quadrupled from 1989 to 1993 (UNTACT’s report: 1993).

Hence, speculation on the property markets is very common in the city and the country as a whole. This undeniably encourages people to sell their land and houses, often to mainly foreign companies with Cambodian representatives that are only interested in profits. In turn, this encourages squatting and illegal construction, as it is the only means for property owners to obtain hard cash quickly. Many of these former house owners thus squat or move into squatter settlements after selling their properties as the new place of residence is cheaper or free of charge (this factor will be discussed in

¹⁸ Of course the state's involvement does not mean that the state should control the markets. In fact, it should implement some measures to combat the land and housing speculators. This occurs because of its own corrupt governing system, the government’s poor housing policies, an ineffective property tax system etc. These make land and housing speculation not only possible, but untouchable.

the chapters on the study's findings). This is possible because of the good connections between squatters and the authorities.

Property trading hand in hand with squatting became a boom business in which every corner of the city was undergoing construction both legally and illegally. Development further speeded up in the late 1991 and early 1992 when thousands of United Nations personnel arrived in the country to help with Cambodia's national election in 1993, that led to a further demand for housing. It is not surprising that land and housing prices in the city were highest between 1992 and the end of 1993. At that time around 30,000 UNTAC (United Nation Transitional Authority in Cambodia) personnel had to be accommodated in the country, while housing - particularly new buildings and hotels in Phnom Penh - was very limited. As a result, land and house prices have quadrupled since 1990 (UNTAC: 1993). For example, the report compiled by the United Nations¹⁹ notes that:

As an indication of the rate of inflation in the property rental sector, a 3 bedroomed apartment with a rent of about US \$1,500 per month in March/April 1992 fetched a rent of US \$ 1,800 per month by June/July of the same year, and close to US \$ 2,000 in September. Hotel charges for a double room (in a renovated hotel) have risen from US \$ 35 to 40 at the beginning of the year to about US \$ 55 to 60 in April and US \$ 70 to 80 in July. In October 1992, three to six months' rent had to be paid in advance, in US dollars, under terms of most housing contracts.

Moreover, the impact of property speculation on the land and housing markets in the city also extended to the low-income group areas, since the property speculators bought most vacant plots²⁰. However, a graphic figure of the relationship between the supply and demand of land and housing shows it started to stabilise in early 1994 when most of the UN personnel had left the country. Then, the prices of houses and land also settled at a lower level compared with 1992 to 1993. A graphic of the demand shows a sharp decline to its lowest level after the military coup in the country in July 1997 (as this is called in the West), when a number of hotels and rented houses such as villas and apartments were deprived of residents because the fighting scared away foreign investors.

Housing in Cambodia, particularly in Phnom Penh, is also affected by the lack of an effective banking system in the country that discourages saving among the population, especially the low-income group. This failure is also due to the many civil wars the country has experienced during

¹⁹ This report was published in English in the form of a case study on " the Short-term Impact of UNTAC on Cambodia's Economy" in late 1993, which the author personally obtained from the UN office in London, 1994.

²⁰ Sources: Author's own observation and the informal interviews with local authorities

recent decades, resulting in many changes in the ruling system of the country. The changes of the regimes adversely affected the property rights of the population, particularly during the Khmer Rouge regime when all private property rights were abolished and the country experienced a unique population resettlement (See above discussion). The next regime then, as mentioned earlier, produced yet another unique property situation of creating new property ownership. All of these drastic changes led to a lack of confidence among the population, especially among the low-income group, in investing their meagre income on land and housing. As a result, most of their savings were not deposited in the banks or invested in houses or land, but was in the form of family jewellery (See also ODA case study report: 1997).

In summary, since the country adopted a liberal, market economic policy in the middle of 1989, the supply of private companies and individual property owners have managed housing and land in the city market. While the government controls and approves technical and legal procedures of property transactions, such involvement also increase the cost in the property supply sector due to bureaucratic red-tape and rampant corruption of the government's under-paid employees.

1-6 Structure of the Thesis

This thesis is written in six chapters, divided into four parts:

Part I: Introduction

Part II: Review of The Literature on Migration and Squatting and Relevant Issues

Part III: Methodological Approach of The Survey

Part IV: Findings, Conclusion and policy implications

Part I contains one chapter - this introduction. Part II also comprises one chapter which provides an examination and discussion on the concept of squatting and migration. It discusses the definition, types and the process of migration and squatting in general and in developing countries in particular. The chapter also discusses the literature on the relationship between squatting and migration in cities of developing countries. It also attempts to reveal the physical and socio-economic characteristics of squatter settlements in developing countries, including existing government policies and their impact on squatter settlements, as well as general living conditions and environments in squatter settlements.

Part III consists of one chapter which outlines the theoretical and practical basis of the many methodological decisions that have been identified in this study, providing a detailed report of the methodology used in this research. It discusses the approach and type of design that have been applied, the terms under which my field study has been carried out and the sampling and analytical processes selected for this research. Finally, it provides the main guidelines on the methods of testing and analysing data by using SPSS Soft Ware Package programme.

Part IV has three chapters. Chapter Four examines the physical and socio-economical characteristics of the three chosen squatter settlements and a slum area of Phnom Penh city. It also provides the demographic characteristics, including sex, age and marital status, and the socio-economic characteristics, including education, job and income of the studied squatters and slum dwellers. The chapter also examines the studied population's type, status, processes of and reasons for migration to Phnom Penh city.

Chapter Five analyses the situation of movement into the studied squatter settlements, the processes of becoming either a squatter or slum dweller, the reasons for squatting or living in squatter settlements, and the reason for planning to or not to plan to squat of the studied population. It also reveals the methods of planning to obtain land in squatter settlements of those slum settlers who plan to squat or live in squatter settlements. Finally, Chapter Six provides the summary of these findings and discusses the conclusions of this research and policy implications.

Chapter Two: Literature Reviews

Introduction:

Most, if not all, of the previous writers and scholars (as mentioned in Chapter 1-1 and later in this Chapter) argue and believe firstly that squatting in most cities of developing countries is a by-product of the inflow of newcomers mostly from rural areas; Secondly they argue that the main reason for squatting is the unaffordability of the non-squatter property market since most squatters are believed to be newcomers escaping rural poverty who arrive in cities with almost nothing. It is a prevailing belief among most writers that the increase in and spread of squatter settlements is also the result of a fast growing urbanization.

According to this presumption, there are two main factors which increase the rate of urbanization in most Third World countries: the rural push (which is the strongest factor) and the urban pull factors. The first factor is defined as rural poverty, war and natural disasters which push massive sections of the rural population to migrate into urban areas; while the second factor implies the job opportunities, better education and health services, entertainment, etc., of cities which attract migrants from the place of origin (rural areas) to the destination (urban areas).

The above assumptions lead many governments to conclude that squatter settlements is a haven for crime, prostitution, political violence, squalor, etc., and authorities therefore often consider squatters as land pirates, land speculators, political fugitives, etc. Consequently, because of these factors, the poor housing condition and sometimes the lack of even basic infrastructure and services, squatter areas are also regarded as the most disgraceful face of cities and even the most undignified part of a country's image.

This chapter has 6 sections. Section 1 provides the discussion on the definition and type of the term squatting and migration. It also discusses the formation and types of squatter settlements commonly found in cities of developing countries, and the classified categories used in this study. Finally, it defines the common types of migration, including a discussion of other scholars' approaches and findings on such issues in cities of developing countries. Section 2 is a discussion on the socio-economic characteristics of squatters including education, job and income. It also

provides the discussion of the reason for squatting or the relationship among squatting, migration and poverty. Finally, the section discusses the process of movement into squatter settlements. Section 3 discusses the terms urban and rural, shows where these terms have been used differently by authors, and states the researcher's definition of the terms as used in this study. Section 4 highlights and examines the physical and socio-economic characteristics of squatter settlements including physical location, squatter housing conditions, services and infrastructure. Section 5 discusses the attitude and policies of many governments of developing countries towards squatter settlements, including squatter clearance and the impact of competition among political parties on the squatter settlements and the inhabitants. Finally, section 6 provides a summary of what this chapter has achieved.

2-1 Definition and type of the Terms 'Squatting' and 'Migration':

This section offers the discussion on the definition and type of the above terms and highlights how often these are defined and used in literature by different scholars. It also provides a definition of the terms in the context of this study.

2.1-1 Definition of Squatting, Squatter and Squatter Settlement:

The term squatter settlement, if not defined precisely, can lead to a misunderstanding of the term slum. In fact many writers, including Marris (1967, p. 41), often use the terms interchangeably, since the terms squatter, slum, and other low-income settlements are however very difficult to distinguish from each other, and in many cases they are simply regarded as illegal settlements. As Potter *et al* (1990, p. 87) and UNCHS (1982, p. 14) argue that the distinction between slum and squatter settlement is inevitably a loose one as there are many aspects to the study of settlements and it is hard to discern uniform patterns. Slums however, are often considered a legal part of an urban area but are also overcrowded, with poor living conditions and older houses compared to other parts of the city, and inadequate services (UNCHS, Habitat: 1982, p. 14)

In most literature on housing in developing countries, according to a number of scholars, the term squatting is often used to refer to an illegal occupation of land (Abrams: 1964, Eades: 1987, Potter *et al*: 1990). As McAuslan (1987, p. 49) concludes that "a squatter is a person who has taken over land, a house or building and occupies it without lawful authority to do so". However, Turner

(1969, p. 508), prefers the term squatter settlement as "autonomous urban settlements". Yet, often in many other writings the term squatter settlement refers to a settlement or camp for refugees, for example in the case study of Hong Kong by Frank (1981, p. 74) where squatter settlements or shanty towns are the housing settlements for the refugees from mainland China.

Nonetheless, in an early study on squatter settlements, the United Nations used the terms informal, shanty, or spontaneous settlements rather than squatter settlements UNCHS (1987, p. 13). In some other cases, squatter settlements are known as clandestine settlements in which case a settlement is defined as such solely because of government's classification regardless of other factors (Burgwal: 1995, p. 47). Moreover, the standard of housing materials and type of construction technology (i.e.: local or traditional methods, self-help housing methods, etc.) are also used as criteria for defining the term squatting. For example, Johnstone in 1979 used this criteria to define squatter settlement although he called it as unconventional settlement rather than squatter settlement. In his work, the term unconventional housing refers to a settlement which is:

Not developed through established regulated, legal and/or socially acceptable channels and which do not utilize the recognised institutions of housing, that is, planning and licensing authorities, land alienation and purchase, commercial banking and real estate systems; and which does not conform to modern standards of construction and health, style and tastes (Johnstone: 1979, p. 19).

This concept, however, is criticized by later scholars including Drakakis-Smith (1981) on the grounds that Johnstone's theory concentrated mainly on the "legality of land occupation and left behind other important factors". The latter perception points out that many of the poor quality and temporary settlements in cities of developing countries also contravene legislation relating to types of building materials and construction methods. The argument further shows that such a definition does not necessarily ensure that the correct statistical and cadastral information has been achieved. Moreover, Poor housing conditions and the poor services in some low income settlements are also used as criteria by many government authorities to define squatter settlements (Chabbi, 1986; UNCHS, 1996, P. 240). For example, Main *et al* (1997, p. 117) point out that "in South Africa, the term 'informal settlement' designates unserviced shanty towns composed of rudimentary shacks in contradiction to the fully serviced formal housing unit constructed and managed either by the state or by private developers for renting or selling".

Finally, according to Table 2-1, the generalization of the definition of squatter settlement is unlikely to be viable and perhaps even worthless since different definitions reflect different philosophical approaches to the housing issue and that squatter settlements are differently formed in different areas. It is important to understand the variety of terms used in referring to such a settlement (like spontaneous dwelling, marginal settlement, shanty, irregular, barrios, uncontrolled, unauthorized, marginal settlement or whatsoever). For example, squatter settlement is a confusing term with which to describe a dwelling built on purchased land, while the term shanty is inappropriate for houses built with brick and stable materials in an overcrowded area in the sense that many such urban developments are highly organized by their leaders to avoid eviction (Gilbert and Ward, 1982).

In summary, one should not try to generalize the definition of squatter settlement so that it could apply to all cases as this could be misleading and result in confusion. Therefore, this study adopts the definition of a squatter settlement as whatever type of settlement is built on someone else's land (thus land which do not belong to the settlers), and those settlements whose inhabitants do not have lawful occupancy. The occupiers or inhabitants of the mentioned settlements are, therefore, considered squatters. The buildings and land in this context are not necessarily owned by either public or private sector. Finally, land or buildings purchased without recognition by the country's law (i.e. through black market channels) are also defined as squatter settlements. However, in this case study squatting on vacant land is the main subject of the investigation.

Table 2-1: The Different Definitions of The Term 'Squatter Settlement'

The term	Land ownership		Govt. building standard and regulation		Suitable location of land to be built as residential settlement.		Land tenure provided by the government		Services and facilities provided by the government	
	Legal	Illegal	Meet	Fail	Yes	No	Yes	No	Yes	No
Squatter settlement		*	*	*		*				*
Slum	**			*	*		**	*	**	*
Shanty town	*	*	*	**		*		*		*
Spontaneous settlement	*	**	*	**		*		*		*
Informal settlement	*	*	*	**	*	*		*		*
Illegal settlement	*	**	*	**		*		*		*
Irregular settlement	*	*		*	*	*		*		*
Marginal settlement	*	*		*		*		*		*
Low income settlement	**	*	*	**	*		*	**	*	*
Clandestine settlement	*	*		*		*		*	*	**
Unconventional settlement	*	*		*	*			*	*	**
Autonomous settlement	*	*		*	*	*		*		*

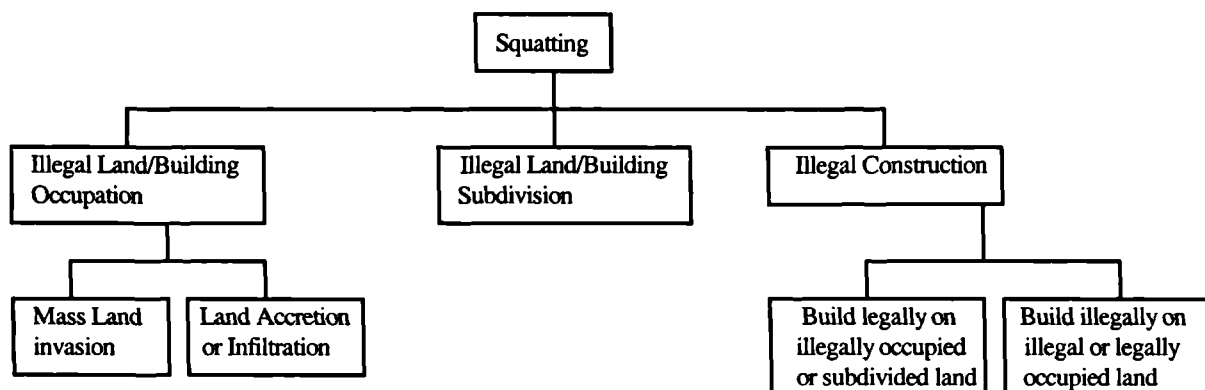
Note: -The "*" indicates the status yes, no, legal, illegal, meet, fail, as used in the Table.

-If there are two "**" indicates stronger answer of yes, fail, etc., compared to only one "*".

Sources: Summarized from Section 2-2 above.

2.1-2 Formation and Type of Squatter Settlement:

The type of squatter settlements as shown in Figure 2.1 below, could be classified into three main groups: illegal land or building occupation, illegal land or building subdivision, and illegal construction. Firstly, illegal land or building occupation refers to property which is unlawfully occupied or illegitimately purchased. This type of squatter settlement includes land or building invasion and land accretion. Secondly, illegal land or building subdivision applies to property which is subdivided without the permission of authorities, regardless to its shape, size, location and other characteristics. Finally, illegal construction are those that fail to meet government approval of either land tenure or building permit.



Note: Build illegally applies to those constructions whose owners do not have either permission from government authorities to build or do have, but fail to comply with the approved building plan as required.

Figure 2.1: Common Types of Squatter Settlements

- Illegal Land/Building Occupation/Squatting on Vacant Land/in Vacant Building: Illegal land or building occupation has generally occurred in two forms. Firstly, organized land invasion is mainly found in cities of Latin American countries. Many scholars believe mass land invasion, especially in Latin American cities, is well planned and organised by squatter settlers before the land is taken over in order event to counter any possible action by the government and land owners. In addition, Turner (1967, 69 and 72) adds that planning an invasion in some cases involve the support of political groups who in turn need squatters to vote for them. Ray (1969,p.33) agrees with the view as he argues that contact with at least one of the political parties which share governing power in a city is an essential principle for successful invasion. This connection is important, because it safeguards the leaders of the invasions against government reaction. For

example, in Quito squatter settlement, Burgwal (1995, p. 67) discovers that " The land invasion was led by politicians and union leaders".

Moreover, organized land invasion, some times, is also encouraged and even sponsored by land owners which is often found in the cities of Latin America. In Guayaquil, Ecuador, for example, squatting in many swamp land areas were supported and sponsored by the land owner since:

Such areas (mangrove swamp lands) can only be deployed at considerable cost, land owners sponsor invasions and help barrio leaders demand land fill, electricity and other services from the government, thereby increasing the value of formerly unusable land, the value of the remaining land and the amounts of compensation the land owners can demand from the government for his loss of property rights (UNCHS, 1996, p. 345).

In African cases, land invasions or seizures are often initiated and carried out by the government politicians and their clique themselves (Eades, 1987; Werbner, 1987; Amis, 1987; Mitullah, 1992). Such land seizures or invasions often happen on undeveloped lands in suburb areas of the cities where the sites are provided with some basic services and infrastructure such as roads, water station, etc., and sell to the poor or low income groups. In some cases, the invaders or seizureers build houses (normally small huts) and then sell or let to the second settlers in contrast to most cases of Latin America where most squatters invade land for housing themselves.

The process of invasion and establishment, however, varies according to the preference of the squatters, government attitude toward squatter settlements, and the level of involvement of politicians. In most situations, squatting takes place within hours and even during the night. Turner (1967) shows the example of Lima, Peru where the well organized Cuera invasion took place at night involving several hundred men, women and children who invaded land along the city's rail tracks. After several serious confrontations with authorities and brutal police reaction, the squatters were allowed to stay temporarily. Some five weeks later, the invasion proceeded to another section of vacant land nearby.

Although organized land invasion mostly occurs on public land, Gilbert and Ward (1985) argue that it is also found on private land where authorities are less inclined to take action against squatters than if public property was invaded. In the case of Valencia, for example, most invasions occurred on private land since government did not defend private land as effectively as public or community land. Organized land invasion is relatively common in Latin American cities, it is also found in cities of South Asian countries. For example, Van der Linden (1982) indicates that organized land

invasion has emerged in Karachi's Islam Nagar area, Pakistan. In this case of organised land invasion in Karachi, Van der Linden (1982) is impressed by the perfect design of the plan in that the invasion time chosen coincided with the termination of former prime minister Bhutto's government. Following many clashes with authorities and police, the invasion was eventually successful with a court decision preventing further disturbance of the settlements by authorities.

Secondly, illegal land occupation is also found in the form of land accretion or infiltration during times of rapid urban growth reflecting particular historical circumstances as in the case of Phnom Penh (as discussed in Chapter 1). The process normally starts when individual households gradually move into vacant land which are commonly unsuitable for residential development. Mangin (1967) argues that this type of squatting often takes place on sites where there is little confrontation from land owners and authorities. In the case of the squatter settlement of Rouse Avenue in Delhi, Payne (1977) reveals that the site was ideal for migrants or refugees coming to the city. The first huts were built well before the sub-Indian continent partition in 1947. The dwellings were temporary structures which were built against the high brick wall that ran the length of the site. Once it was clear that the early squatters would not be evicted, other families moved in and the area became increasingly congested.

Yet, squatter accretion are in some cases caused by ineffective government bureaucracies and policies on developed lands. Johnstone (1979) indicates that in the case of Kuantan in Malaysia, the settlement was initially legal in that all the early residents were former squatters who had been forcibly moved from their places of origin to the settlement where they were expected to pay for the land. When many of them failed to do so the area was subsequently classified a squatter settlement by the same government authority. Although the settlement was now regarded as illegal, Johnstone (1979) reports that no action was taken to evict squatters from the area. Johnstone (1979) further notes that only those who continued to pay the fees were considered legal residents, while those in the same area who failed to pay were classified as illegal occupants and therefore squatters. In other words the government, who established the area, regarded it as a squatter settlement when they failed to collect rent from residents.

- Illegal Land or Building Subdivision: Though this type of settlement is illegal, or regarded as a squatter settlement by the government in most developing countries, it is often seen by authorities as a better alternative to illegal land or building occupation which inherently poses more

complicated problems. Many illegal subdivisions takes the form of entrepreneurial development where private companies illegally subdivide developed land or housing and sell it off (Eades: 1987). As the area is continually developed, the price of land and housing inevitably increases and property is further subdivided illegally to be re-sold. The area thus becomes increasingly crowded and then overcrowded, at which stage it no longer matches the original development plan approved by the authorities (Mittulah: 1992).

Consequently, the authorities consider the whole area a squatter settlement. The characteristics of illegal subdivision are summarized by Van-Der Linden (1982) in his study of squatter settlements in Karachi, Pakistan. Firstly, the security of tenure is very high despite the fact that settlers do not get documentary proof of their unofficial rights. Protection against eviction is guaranteed by squatter leaders, who can obtain protection from politicians or key persons in the government administration. This is rather different from the case of Phnom Penh where squatter landlords are themselves the government military or police commanders (Comment from experienced professionals, personal communication: September, 1999).

Secondly, settlers have to purchase their land. Often the first settlers pay a small amount for their plot but land prices have risen by the time they take up residence. Whatever the amount paid, the buying and selling of land in the settlement is characteristic of squatters and there is often considerable speculation. Thirdly, leaders plan the layout of the settlement and organize the sale of the plots and the provision of basic services.

- **Illegal Construction:** Finally, illegal construction - already defined earlier as only being a violation of building laws - has attracted less attention from most writers. It is acknowledged, however, that data and information on this type of squatter settlement are usually indistinguishable as it is often included with that of the previous two types.

For example, in a case study of squatter settlements in Tanzania squatter housing is defined as those which are built on either unsurveyed or surveyed land but without authorized occupancy (Stren: 1975, p. 54), which would then include houses of the first two types of squatter settlements.

Table 2-2: The Common Types and Formations of Squatter Settlements

Type of squatter settlements	Formation of squatter settlements	Common or favourable location	Is well known to be taken place in:
Mass land invasion or organised land invasion (Illegal land occupation)	Squatters had planned invasion beforehand and it involved good organisation. The invasion could involve thousands of squatter families and could take place within hours.	Often on large areas of vacant and undeveloped land in suburban areas of cities regardless of the ownership of such land.	Latin American cities
Land accretion or infiltration (Illegal land occupation)	The invasion is unorganised and takes longer (months or years). It is in the form of illegal land enlargement or border encroachment.	Usually on smaller pieces of land compared to the above type of land invasion, in developed or suburban parts of cities.	Asian and African cities and to a lesser extent Middle Eastern cities
Illegal sub-division	Lawful landowners illegally sub-divide land into small plots in order to sell illegally for big profits.	On large suburban areas of undeveloped or agricultural land, or on smaller sites within developed parts of cities.	Most cities of the developing world.
Illegal construction	Lawful landowners build houses without permission from the government or with permission but failing to comply with the government approved plan.	Not much is mentioned about it in the literature, but in the case of Phnom Penh it happens often in the city centre, particularly where the property price was high.	Not much is mentioned about it in the literature, but it should happen in most cities of developing countries, and perhaps also in developed countries.

Source: Summary from this section

Stren (1975) further adds that the quality of the construction is not important in judging whether a settlement is illegal or legal as in some cases squatter houses are even better than legal houses. In the case of illegal construction in Phnom Penh, most of these type of buildings are of high quality and have been built for luxurious purposes. Such buildings often belong to wealthy, high placed government officials. In summary, this type of squatter settlement is often found where property owners build structures which violate the approved plan issued by the authorities. In conclusion, types and formations of squatter settlements in most cities of developing countries can be summarised in Table 2-2 above.

2.1-3 Definition of Migration:

This section aims to review the literature on migration in order to better understand what migration is; how many types of migration, which are often believed to have a strong relationship with squatting and urban poverty, have emerged in cities of developing countries; and finally, how to define and distinguish those types of migrants? Like in the case of squatter settlements, many studies have been done on migration by different scholars and researchers for different purposes.

The term 'migration' is often used to describe many different ways of movement of the population, which can lead to misunderstandings or confusion unless the term is clearly defined.

This is because many similar terms, such as mobility, circulation, movement, commuting, floating, oscillation and sojourning, are also widely used to describe movement of the population similar to that described by the term 'migration'. However, in some cases, the term is very difficult to define in the sense that those who have moved from a place of origin maintains some level of commitment with their place of origin, and because of the lack of precision and consensus on the duration of stay in a new place and the distance of movement of a supposed migrant (Jeremy:1987, p.201; Davin:1999, p.20). For example, in the case of China, Scharping (1997:12) shows the difficulty in distinguishing the term migration from others as it is tangled with the fact that:

The movement of peasants is restricted to short-distance commuting for non-agricultural work in township and town enterprises (leaving the land, but not the village), whether it entails longer circulatory sojourns in urban places with land holdings at home being kept (leaving the village, but not the land), or whether it ends up in a lasting rush away from the villages (leaving the land and the village).

Yet, as Abella (1992) argues, all of these terms are sometimes indistinguishable or interchanged by different scholars, academics, international organisations and government institutions. It is understood that such terms are defined in different ways by the mentioned scholars to fit the purposes of their studies. In addition, the available data from which each definition is derived seems to fit only their subject of interest and thus the definitions could not be used as a general definition (Davin:1999, p.20). As Skeldon (1990:25) argues: "Different definitions, different scales of analysis and different objectives for collecting the data make it difficult to blend the information into a coherent picture." As in the case of China, Davin (1999:20) points out that "different agencies work with different definitions of migrants and migration that could lead to different evaluation of the terms and the numbers".

Abella (1992), Boyd (1989), Kritz & Zlotrik (1992) and Battistella & Paganoni (1996) argue that the conventional distinction is between 'permanent' and 'temporary' migration, but many

other researchers¹ have pointed out that the distinction between permanent and temporary, skilled and unskilled, family and non-family, legal and illegal, and other dichotomous classifications may not be too useful because differences between migration types are increasingly blurred in practice. Nonetheless, as mentioned early, the term migration is mainly defined based on the length of stay in a new place of a supposed migrant, the distance of a movement and to the far extent a commitment of a person to his/her place of origin. According to Richmond (1994, p.3), the term migration comprises two levels of movement. One can perhaps relate the differences between these two levels of movement to the use of the term 'mobility' as opposed to 'migration'. The former refers to lower-level movement, such as shopping and commuting to work, which tend to be over a short distance and time-scale, while the latter refers to higher-level movement, such as moving to a different boundary and staying there for a certain period of time, which tend to be over a long distance and time-scale (Honig: 1992, Rowe: 1989, Wang: 1993). However, even these two types of movement are not straightforward (Honig: 1992, Rowe: 1989, Wang: 1993).

Consider, for example, movements such as for temporary work and further education (Day & Xia: 1994, Davies et al: 1995). These invariably result in a change of residence, which is usually only of a temporary nature, lasting from a few weeks to a few years, after which time a return to the previous place of residence may be made. Moreover, the confusion about the terms continues as Skeldon (1990:12-3) argues: "Migration and circulation, can be subsumed under the term mobility. Mobility and its subsets, migration and circulation, in practice have to be pragmatically defined. From some courses of data it will not be possible to differentiate at all between long-term residential shifts (migration) and short-term movements (circulation). The term migration is commonly used in the literature explicitly, but more commonly implicitly, to cover both types of movement."

It is important to recognise the problem resulting from these various levels of migratory movement, some of which are possibly or probably of only a temporary nature, when it comes to examining post migration, since the sources for the study of historic migration patterns invariably fail to indicate both low-level movement and temporary short-term changes of residence². Thus, the

¹ See for example, Skeldon (1990), Champion & Fielding (1992), Richmond (1994) and Scharping (1997)

² These general problems of definition in relation to historic migration patterns are discussed in Tilly (1979:177-83).

definition dilemma that confronts mobility researchers is illustrated by the bewildering array of arbitrary distinctions contained in micro-level studies.

Table 2-3: Different Definitions of the Term Migration in the Case of Indonesia and Melanesia by Different Scholars

Case	Definition			
	Oscillation	Commuting	Circulation	Migration
Hugo		The mover regularly (though not necessarily every day) goes to a place outside his village to work or attend an educational institute, but returns to the village most nights.	The mover's absence usually involves him sleeping at his destination for continuous periods of up to six months.	The mover is absent continuously from the village for six months or more.
Mantra		A movement across the dukuh (hamlet) boundary for at least six hours and no more than twenty-four hours.	A movement across the dukuh boundary for at least one day, but less than one year.	An intentional shift of residence across the dukuh boundary for one or more years.
Bedford	Routine daily movements - shopping, the journey to work and to school, visiting - and other movements involving an absence from home of less than one month.		Movement involving an absence of more than one month, where the intention of the mover is to return to live in the village at some stage.	Movement where the intention of the mover is to settle at the destination. He/she may visit the village periodically, but has no plans to return there to live.
Young	Routine daily movement as well as brief casual visits on business or for social reasons.		This occurs when a migrant has returned to his village of origin after a period in residence elsewhere, and has no plans for subsequent movement.	Movement where the intention of the mover is to settle at the destination. He/she may visit the village periodically, but has no plans to return there to live.

Sources: Hugo 1978, Population Mobility in West Java; Mantra 1978, Population Movement in "Wet" Rice Communities; Bedford 1973, New Hebridean Mobility; Young 1977, Simbu and New Ireland Migration.

The definition of migration depends on how movement is labelled and in practice is limited from country to country (Wang: 1993, Davies et al: 1995). To illustrate this, definitions of forms of migration and circulation used in two inquiries in South-East Asia and another two in Melanesia are summarised in Table 2-3 above. The main difference in these simple topologies is the distinction between 'circular migration', oscillation, commuting and 'migration'. In South-East Asian studies, the length of time spent in residence outside the place of origin is used as the delimiting characteristic; six months in the case of Hugo's study (1978), and twelve months in the inquiries by Mantra (1978).

In the Melanesian cases cited, two different approaches are used by Bedford (1973) and Young (1977) to define migration. These analyses have been criticised by Ward (1980) and Champion & Fielding (1992). Ward (1980:119-34) argues that such a simple classification of the kind outlined by Hugo tends to fragment explanation and by implication ascribe some intrinsic theoretical significance to what is purely a device to facilitate description and analysis. Champion & Fielding (1992:186) state that: "Migration theories and empirical investigations have their securest foundation in aggregate data analyses, but their insights have been strengthened by the results of behavioural studies.

Others like Zelensky (1971) argues that the term mobility is perhaps the most general concept in migration studies. It includes all kinds of territorial movements, both temporary and permanent, over various distances. Yet, Kossinski & Prothero (1975:1) and Hornby & Jones (1993:98) state that "migration is a much more restricted term than circulation in that it is normally used only to describe a movement from one administrative unit to another that results in a permanent change of residence". For example, "usually, a migrant is defined as a person who moves from one administrative unit to another" (Kosinski & Prothero: 1975, p.1). Additionally, Zelinsky (1971) shows that most definitions of migration include references to permanent change of residence. Movements which are not within this category therefore are those which do not involve any permanent change but are of an oscillatory nature. Those movements where there is no permanent change of residence can be most suitably described by the term circulation to include a great variety of movements, usually short-term repetitive or cyclical in character, but all having in common the lack of any declared intention of a permanent or long-standing change of residence.

In summary, it is reasonably clear that the use of more theoretically-based definitions may be limited in practice by the need to depend upon official surveys or the type of research. Despite the difficulties of defining migration precisely, at the root of all of these definitions is a common feature, namely the movement, usually of residence, from one geographical location to another. Besides this common feature, the elements which a definition of migration commonly contains are: 'change of residence' between different places, 'duration of stay', 'distance travelled', 'motives', etc. Selection of one or another element depends mainly on the theoretical approach and the data available. Due to this particular reason, differences in opinion also occur in classifying migration into different categories (Mortuza:1992, p.15) as discussed later.

In conclusion, due to the different topics of the studies or their interests and the available data of different locations, one should not try to generalise the definition of the term migration and apply it to different cases. This will never work and only leads to the misunderstandings over the issue. As Scharping (1997: 13) concludes: "Migration studies have neither succeeded in establishing an all-encompassing ground theory, nor have they been able to develop a universally accepted conclusion. Geographical, sociological, psychological and economic approaches have focussed on different aspects of population movement."

It is however, very important that every study related to the issue should give clearly the many factors or criteria used to define the term migration or migrant in that study in order to avoid such the misunderstanding, or an under- or over-estimation of the term migration. Hence, in order to render this empirical research more meaningful and to identify this topic more precisely for the purpose of this research, the present study uses the following definition for migration:

Migrants move away permanently or for at least six months (at the time of the interview) from a place of origin to Phnom Penh (See Figure 2-2, p. 81), the movement of which involves a change of residence from an area of origin (departure) to the city (arrival). The term 'urban' and 'rural' which are used in this study are those discussed and defined in section 2-3 (p. 94) of this chapter.

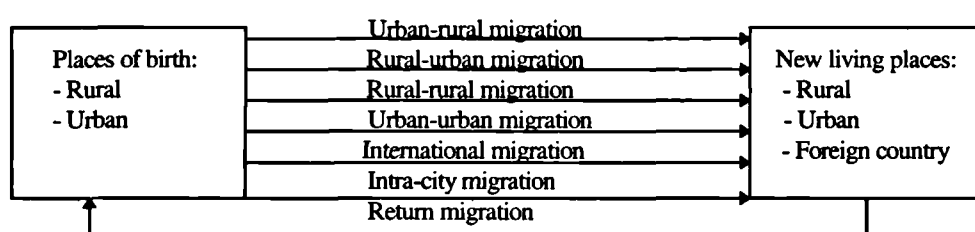
2.1-4 Common Migration Types:

Migrants are divided into two types relating to the place of birth (as shown in Figure 2-2) and the length of their stay in a place respectively. The first migration type - that relating to migrants' place of origin - has attracted the most attention in academic field studies and is often further categorised into different types, depending on different scholars' interests. For example Archer (1986: 5-8) claims there are nine types of migration relating to place of origin: migration, periodisation, immigration, emigration, voluntary migration, forced migration, internal migration, international migration and return migration.

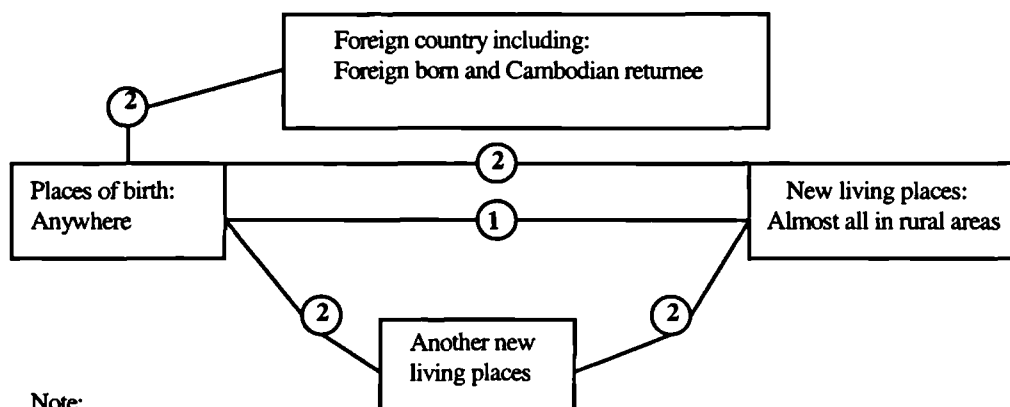
However, his explanations on each of these terms could allow a reduction to only seven types of migration which originated from two main migration types: internal and external migration regarding to the boundary of places of shifting residences (within a country and between different countries). With regard to internal migration, this section will briefly discuss urban-urban, rural-urban, intra-city, urban-rural, rural-rural and return migration, while external migration entails

immigration. The study also notices that as shown in Figure 2-2 that due to the unique population movement of Cambodia, the birth places of the population which are used as criteria by most scholars to define the type of migration are inappropriate for the case of Cambodia. This study, thus, uses the places of living before the population first migration after the Pol Pot regime. For example, if one lived in rural areas after the Pol Pot regime, then this person migrated to other cities of the country before move to Phnom Penh, the person is called other cities to Phnom Penh migrant.

A- Common definitions of migration in most literatures



B- Population movement within Cambodia of the last 14 years



Note:

- 1 From 1975-79, all population were forced by Pol Pot regime to move to rural areas
- 2: Return to Phnom Penh or another new living places after the collapse of Pol Pot regime.

Figure 2-2: Places Used to Define Types of Migration

- Rural-urban Migration: Rural to urban migration has been the subject of countless studies. It is commonly referred to as the movement of people from a place of origin with rural characteristics to place of destination with urban characteristics (these terms are discussed in Section 2.2) for what many believe are mainly economic reasons (Fields:1974, Mortuza:1992, Day &Xia:1994, Qian:1996, Rao:1996, UN:1997). Many scholars, as partly discussed in Section 2.4, often explain the economic reason for this migration type as being based on the two main factors of urban pull and rural push, with the second dominating the first.

Firstly, the urban pull factor refers to the many urban opportunities, such as employment and education, healthcare facilities and entertainment, which are far better in cities than in rural areas. This is believed to attract people to migrate to cities, and especially the big cities of most developing countries. Secondly, rural push is caused by possible insurgencies along some rural areas and rural poverty. Such poverty can be caused by natural disaster or the limited supply of farmland and the increase of rural population without the increase of the land, for example where arable land availability decreases due to industrial expansion, which in turn decreases income from cultivation.

- Rural-rural Migration: This type of migration is defined as the movement of population from a place of origin with rural characteristics to place of destination also with rural characteristics, regardless of the size of the places. Although this type of migration has not often been the centre of attention for studies and research, the main reasons behind such movement are natural disasters (involuntary migration), government projects including hydro-electric dam construction and civil war, where such movement is also often temporary in the case of refugee migration in the sense that they will go back to their places of origins once the war ended; but long-term in the case of government policies where migrants required to resettle permanently in the new places (Voh:1988).

The movement could also be from one rural area of land pressure to another where land is available. In addition, rural-rural migration also happens because of the traditional movement of settlements from one place to another as a result of agricultural methods, as reported by Eades (1987) in the case of Botswana and tribes in other African countries. The method is explained on the grounds that people move from one place of agricultural planting (after two to three harvests) to new ones. However, such activities have become unpopular and have been discouraged by the governments as it affects the environment.

- Urban-rural Migration: Urban to rural migration refers to the movement of population from a place with urban characteristics to another place with rural characteristics (the terms urban and rural are discussed in section 2-3). This type of migration is not very common in most developing countries where, as mentioned earlier, rural areas are often the source of poverty where there are a lack of productive job opportunities. Therefore, there are not many reasons for the urban population to move to rural areas. However, the reasons for urban to rural migration could be

similar to that of the return migration, where migrants return to rural areas as a retired resident after having worked in urban areas (Yap:1977, Johnson & Salt:1990).

This is because they have saved enough money to invest in the rural areas (either as their birthplace or just a place where they want to spend the rest of their lives) and where they can enjoy an environment that is perhaps less polluted and chaotic than in the cities. It is also noticed that especially in the form of involuntary migration, mass urban population are forced to resettle in the rural areas as the result of the government policies. For example, in the case of China during the so called cultural revolution of Moa Shedong, hundred of thousands of urban population were forced to resettle in the rural areas (Tan: 1994, Davis et al: 1995). Similarly and worse, in the case of Cambodia during the Khmer Rouge regime between 1975- 79, all the urban population of the country were forcefully evicted to the rural areas of the country .

- Intra-urban or Within-the-City Migration: Intra-urban or within-the-city migration refers to the movement of people from one place to another within a city's boundaries. The main reason for such a change in place of residence is mostly believed to be the pressure of increasing accommodation prices or the increased ability of the residents to afford better accommodation, i.e.: movement from low income to higher income areas (Sabot:1982, Kwong:1987). As Mabogunje (1972) also argues that upward occupational mobility will often be accompanied by changes in residential location within the city.

The movement is a function not only of searching for affordable or convenient accommodation, but also of migrants' length of stay in the city (in other words, their increased commitment to spend at least part of their working life there). In short, intra-urban migration has emerged as mainly the result of low income households moving to cheaper accommodation, especially from the inner city to peripheral areas; and to the less extent and as mentioned above, from the low income areas to the higher ones in the case of those who have job and income improvement.

- Urban-Urban Migration: Urban-urban migration is defined as the movement of people from one place of origin with urban characteristics to place of destination also with urban characteristics. The majority are assumed to depart from a small city to move to a relatively big city (Henderson:1988, Gugler:1997). Urban-urban (or inter-urban) migration not only has occurred in developing countries but also has been the main type of migration for people in Western countries.

For example, World Resources (1996-97, p.11) and UNCHS (1996: 57) show “in North America, most migration movement are inter-urban or urban to urban, where in Western European countries, the urban to urban migration seems to flow from the more congested settlements urban to a smaller urban areas”.

Scholars have found countless reasons for such migration. In the case of developing countries, the most common reason for this type of migration is the disparity in economic development between metropolitan or mega-cities and the smaller cities. That is to say, people move from a smaller city with fewer living opportunities to a bigger city with relatively more living opportunities³ (i.e. better employment and income opportunities).

- International Migration or Im-Migration: Immigration is defined as the movement of people from one nation state to another. The term immigration is sometimes also called international migration, where people move from one country to another for either economical or political reasons (UN:1997, p.8). For example, according to Salt (1996), in 1992 around 702,900 foreign labour migrants entered into Western European countries (Austria, Belgium, Denmark, France, Germany, Luxembourg, Spain, Switzerland and the United Kingdom). While the United Nations (1997, p.38) reports that “the worldwide refugee population has risen substantially over the past 30 years from under 2 million refugees in 1965 to some 13.2 million today”.

It is not that simple to classify international migration based only on the international boundaries, as the United Nations (1997:8) continue that “not every person who cross an international border is an international migrant”. Other factors have to be taken into consideration such as duration of stay in the country of destination. Yet, other problems could occur as “some tourists may stay longer than persons admitted to undertake seasonal work or undergo training, consideration of duration of stay may not sufficient” (Ibid:8). Moreover, like the definition of migration itself, this type of migration could be classified differently by different scholars for different purposes. For example, “from the state’s perspective, the characterisation of international migrants depends on the factors of citizenship and reason for admission, both of which are legal in character” (Ibid:8). In other words, international migration or immigration could be classified differently for different purposes and by

³See most articles on internal-migration, including those by Anzorena & Poussard (1985), Burgess *et al* (1997), and Gugler (1997) who all agree on such assumptions.

different approaches such as from administrative sources, border statistics sources and household-based inquiries, etc.(Ibid:9).

- The Return Migration: Return-migration refers to the movement of people from their recent places of residence to their birth places (King:1986). In other words, the return-migration, as John (1986: 8) describes, is the type of migration which "involves a return and resettlement of a migrant population in their original country or area of residence. Such returns may occur quite soon after the original move or occur at specific stages in the life cycle such as the retirement stage". The main reason behind the return migration is believed to be family-related reasons, such as rejoining the family after a long working life in the city, or other uneconomic reasons such as returning to a better environment in the rural areas where they were born (Liao:1985, Archer:1986). Returning from working abroad after finishing a working contract is one of the most common reasons for return migration, especially in the case of developing countries such as Thailand, the Philippines, Indonesia, etc. (Pongsapich:1995).

2.2 The Socio- Economic Characteristics of Squatters and Their Reasons for Squatting:

This section aims to discuss the common socio- economic characteristics of squatters and their reasons for squatting as raised in the arguments of the study provided in Chapter 1. Basically, it tries to highlight the questions of who the squatters are and what are the main reasons for squatting in the cases of cities of developing countries.

- The Socio- Economic Characteristics of Squatters

It is relatively common to most literature as partly discussed in Chapter 1, section 1-1 and is shown in Figure 1-1, that squatters are assumed to be new rural-urban migrants mainly escaping desperate rural poverty, natural disaster and the insecurity of life in rural areas. For example, in the case of squatter settlements in Nairobi and Lusaka, Moughtin *et al* (1992, p. 32) report that "like their counterparts in Nairobi the squatters of Lusaka are rural people". Shami (1994, p. 60) also reveals that Sudanese squatter migrants were so poor they could not afford transportation costs to Khartoum and had to stop and work along the way. He describes how "the long distance between the South and the Greater Khartoum, and the high cost of transportation involved, forced many of the war-displaced migrants to stop and work at several intermediate locations in order to collect the needed

transportation fares". In addition, the majority of these squatters are also described as uneducated or of a low educational level and employed mainly in informal sectors where they earn less compared to the non-squatter population of cities.

Many scholars also believe that the growth of squatter settlements is directly linked to the urbanization of cities in which government budgets and policies on housing are no longer sufficient to cope with its urban population growth. This growth is also linked to the movement of migrants into cities. A report by UNCHS (Habitat: 1982, p. 26) shows that "as far as squatter settlements are concerned, 9 out of 18 case studies where data were available recorded significant in-migration". Similarly, Basu (1988, p. 2) also finds that in Indian cities, squatting is the by-product of rural-urban migration and inadequate urban planning. In other words, there is an influx of migrants into a city where the housing programmes planned by an authority lags behind in providing shelter for the people.

Migration is believed to out-number natural increase as contributing factor to urban population growth, while among the migration types, rural-urban migration is in most cases considered the main contributor (compared to i.e. urban-urban migration, intra-city migration or immigration). For instance, a report by the United Nations (1985) indicates that among the 26 metropolitan areas in developing countries surveyed, migration accounts for more than 50 per cent of the total urban population growth in six areas: Seoul, South Korea; Sao Paulo, Brazil; Accra, Ghana; Bogota, Colombia; Belo Horizonte, Brazil; and Teheran, Iran (UN, D.I.E.S.A:1985, p. 17). The report further shows that in the case of Turkey, the net migration contributes 62 per cent to urban population growth.

The United Nations (1980) report on squatter settlements in cities of developing countries in Asia in the 1980s also remarks that: firstly, in Colombo, Sri Lanka shanties or squatter settlements appeared and grew rapidly when masses of the rural population moved into the city to escape flooding in the 1950s; secondly, in Manila, Philippine squatter settlements are caused by the mass inflow of the rural population to the city where they hope to find better living conditions and job opportunities. Similar reasons were found for the growth of squatter settlements in Jakarta, Indonesia and Kuala Lumpur, Malaysia. Likewise, in Bangkok, Thailand squatters are mostly those who came to the city because of inadequate infrastructure, a lack of irrigation, increasing pressure

on those with arable land to improve agricultural production, and the high cost of fertilisers (UN, 1980).

In Hong Kong for instance, Main *et al* (1997, p. 136) point out that "the population of squatter areas expanded in line with the sudden influx of population to Hong Kong from mainland China in the 1950s, late 1970s, and early 1980s". Juppenlatz (1970, p. 15) in one of his many case studies of squatter settlements in cities of South East Asia, concludes that "a closer study of the social structure of afflicted cities reveals that there is an increasingly disproportionate number of illiterate, unskilled, nearly unemployable people swelling the urban squatter colonies".

In the case of Karachi's squatter settlements, Hasan (1992, p. 150) points out that "the vast majority (of migrants) are unskilled and illiterate. Initially most of the migrants work at the port or wholesale markets as loaders, as unskilled workers in the transport sector, or as building site labour". In addition, in the case of a squatter settlement in Quito, Ecuador, Burgwal (1995, p. 49) reports that "20 per cent of the adult squatter population did not complete any school and about 60 per cent only primary school". Moreover, in the case of Mexican squatter settlements, Lomnitz (1977, p. 64) finds that "over 60 per cent of heads of households of squatter settlements, are unskilled labourers, 30 per cent are in commercial and service occupations, and 10 per cent work in industry".

Squatters who are poor and of a low educational level are also found to be the majority in cities of African countries. For example in Lusaka, Chawama and Mwaziona, in Zambia, Muller (1979) shows that the majority of heads of squatter households and their wives are from rural areas or international migrants. These migrants hold a very high rate of illiteracy at 61.8 per cent (illiterate and lower primary) in Lusaka in 1969, 66.6 per cent in Chawama in 1974, and 77.0 per cent in Mwaziona in 1973. Perhaps the high rates of illiteracy and the low level of education lead most scholars to conclude that squatters have limited access to highly paid or formal jobs.

Indeed, the level of education and productive jobs are mutually related. Since most squatters are illiterate or educated to a low level, they only find jobs in the informal and thus less productive areas. For example, Sethuraman (1992, p. 79) points out "most studies on the urban informal sector in the 1970s found that a majority of migrants to the cities tend to enter the informal sector. Migrants to the cities are concentrated in low income neighbourhoods, especially in slums and

squatter settlements or even remain as pavement dwellers for several years as in the case of some Indian cities".

Moreover, Moughtin *et al* (1992, p. 48) find the same evidence in most Kenyan squatter settlements. One example is the Korokocho squatter settlement in Nairobi where his research found "90 per cent of the population are low paid employees in the informal sector of the economy". In the case of squatter settlements in Bangladesh cities, Choguill (1987, p. 40) finds a similar situation as 53 per cent of squatter households in Dhaka can only read and sign their own names, compared to 77 per cent in Chittagong and 68 per cent in Khulna. Also, most of them are employed in the informal sector as day labourers, rickshaw pullers, peddlers, servants etc. (Sen: 1992, p.119; Brunn *et al*: 1993, p. 413; Hasan: 1992, p. 150; Moughtin *et al* 1992, p. 30).

Those squatters who are employed in the formal sector hold mostly low profile jobs such as government factory workers, private firm service workers, and technicians (Choguill: 1987). This also applies to many cities in the Middle East and South East Asian countries, as for example Shami (1994, p.36) points out that " According to the research sample, the majority of householders lacked formal jobs. They therefore, relied more on what they gained through casual work in the informal sector and through black market activities". Similarly, Brunn *et al* (1993, p. 426) reveal similar picture in the case of migrants in Vietnam "the large numbers who migrated to Ho Chi Minh city were not able to find jobs nor adequate shelter and thus a large squatter population emerged, crime rates increased, and informal activities including smuggling, became commonplace".

Although the wage difference between the informal and formal sectors is still arguable, the majority of observers have found that squatters' earnings are lower than for those living in formal housing areas. As a United Nations report states: "Certainly, there are relative differences between the standards of structures put up by the shanty (or squatter) dwellers of different countries, but within their respective contexts, they all manifest the deprivation and social inequality being generated by the larger societies" (UN, 1980, p.7).

The UN (1980) also shows as an example the case of squatter settlements in Chandigarh city in India where the arrival of thousands of new migrants, who come to work in construction industries, generated many squatter settlements since these new arrivals only earned enough to buy food. The report states that "only 6 per cent of the planned (or non-squatter, or authorised) part of the city's

population belonged to middle castes, and as much as 43 per cent of squatter population belonged to the low castes" (UN, 1980, p. 128). In a case study of squatter settlements in Nairobi in Kenya, Stren (1973) argues that most of the squatters in Mathare are urban misfits and rural outcasts. However, there are also some studies which suggest that squatters are also the outcasts of long-term migrants and the urban-born population. Raj *et al* (1990, p. 55); Hasan (1992, p. 149); Main *et al* (1993, p. 240) and Western (1995, p.49) point out that some squatters are low-income inner city residents who move from better urban neighbourhoods to the squatter settlements, often because of economic reasons or because they have the opportunity there to obtain a building site.

It is also perceived that although the majority of migrants who have some information about the city and its authorities before their move into the squatter settlement, often have little faith in laws. Many others know little or nothing about government laws and regulations (Hardoy *et al*, 1989). This lack of knowledge and the long-term commitment in the city, along with the limited finances which makes urban non-squatter housing unaffordable, perhaps encourages migrants to be more involved in squatting than the urban-born who are more aware that squatting is illegal and could lead to confrontation with the government and land owners. For instance, Ayata (1987, p. 238) argued that new migrants has less advantage in daily life in the city compared to urban born and long-term migrants, especially in obtaining low price plots in the squatter settlements. As the author points out that " finding the right person to bribe, the right amount, and the right time, poses formidable problems for ordinary migrants in getting land illegally, in the case of Turkey".

However, it is still arguable that squatters who are employed in informal sectors necessarily have lower incomes compared to those who work in formal sectors, as for example Western (1995, p. 28) points out that in Bamako, Mali "some informal sector workers would not want to move to formal employment as their businesses offer similar income and better working conditions". In short, although in most cases squatters are poor, low educated, rural-urban migrants and are also informal workers, the issue is still arguable especially in the case of Phnom Penh which poses a rather unique characteristic (as discussed in Chapter 1).

- Squatting for Cheaper Housing? - The Relationship Between Squatting, Migration and Poverty in Cities of Developing Countries:

The discussion here attempts to verify in length the argument of the study that is discussed in Chapter 1, section 1-1, on the reasons for squatting in reference to the squatters' status of

migration and wealth. There is a general perception that land invasion is the only means for the poor to obtain land for shelter (Mangin, 1963; Turner, 1968, 1969; Joan, 1969; Ray, 1969 and Dietz, 1977). This is based on the presumption that most migrants cannot afford legal housing and accept whatever accommodation is available in the cities, or whatever form of accommodation can quickly be erected with materials cheaply procured, on open spaces that are otherwise unusable or are unused (Basu: 1988). For example, Abrams (1964, p. 12) refers to the term squatting as "the forcible pre-emption of land by landless and homeless people", and says that "the main reasons, therefore, for squatting is the increased pressure of land shortages". Gilbert and Ward (1985, p. 98) also found that in Venezuela land invasion has been the normal means by which the poor have obtained urban land. For instance, in Valencia, Venezuela, approximately 45 per cent of housing in the city is on land initially occupied through invasion.

Many more empirical and theoretical studies have revealed how the growth of most squatter settlements in cities of developing countries is linked to rate of migration. In other words, squatting is likely to be the result of the increase in migration, especially from rural areas. For example, UNCHS (1982, p. 26) reports that "the data from the case studies indicate that migrants are a significant factor affecting population change and stability in squatter settlements.... as far as squatter settlements are concerned, 9 out of 18 case studies where data was available, recorded significant in-migration".

Similarly, Van de Linden et al (1991, p. 447) reveal that "many of Karachi's inhabitants and especially those living in the squatter areas are migrants (of approximately 550,000 new inhabitants in Karachi each year at least 250,000 are migrants)". Commentators commonly assume that the majority of migrants who move from desperate poverty in rural areas end up in already congested cities with high unemployment. These migrants are then likely to become squatters either through direct squatting or through buying or renting property in squatter settlements because they cannot afford legal housing with the low wages earned in the informal sector. This view is strongly supported by Potter *et al* (1990, p. 16):

Most of the migrants who 'get by' in the informal sector are unable to get access to adequate accommodation in the formal or legal housing markets because costs there are beyond their means, especially when they are endeavouring to provide for their families as well as for themselves. If they wish to remain in town - and economic conditions are usually worse in the rural sources from which many have migrated - the informal or illegal housing market is the only alternative.

Empirical case studies in Rio de Janeiro and Lima in the Latin American countries of Peru and Argentina (Gilbert & Ward: 1985) also show that in both cities, one of the main routes of entry for poor migrants into the housing market is by way of old, decayed housing or housing apparently built for proletarian residence which have developed into so-called squatter settlements (Frank: 1981). The relationship between migration and squatting has been increasingly acknowledged to be "an essential link between rural and urban development forces" (UN, 1976). For instance, recent studies in cities in South Africa's KwaZulu-Natal region reveal that "both community and long distance migration remain important for informal or squatter settlement residents" (Hindson *et al*, 1994, p. 13).

This link between migration and squatting is because squatter settlements are seen as the most important shelters of the majority of the unskilled labour force in cities. Migrants, in turn, are generally believed to be part of this population and thus of low income. For example, Burgwal (1995, p. 46) shows that in the case of Quito's squatter settlements "almost all of the squatters said that obtaining a house of their own (that they could afford) was the prime motive for moving to squatter settlements". Without the alternative of these low cost settlements, migration would perhaps only be affordable to a small number of high income rural families or individuals.

Despite the fact that squatter settlements provide many advantages such as being close to workplaces, cheaper rents, etc. (which are what migrants want), the majority of migrants squat or live in squatter settlements to be able to save their earnings. It is generally understood that even among those migrants who are not poor and probably could afford urban non-squatter housing, some do not want to live in the formal areas. Instead, they intend to save as much as they can for other purposes rather than pay for accommodation in the far more expensive formal housing market. In the case study of Hong Kong city, for example, Frank (1981, p. 235-236) discovers that:

Aside from an individual household's savings on rents, there are three other, sometimes overlapping reasons of an economic nature that explain the shanty town's attraction or some in Hong Kong: (a) proximity to work that makes them more advantageous than most resettlement estates and some tenements; (b) ability to carry on certain enterprises in the urban area that can otherwise be carried on only in the rural areas or elsewhere in the urban area with greater overhead cost; (c) for those who might sleep at their places of work, the possibility of ultimately getting a resettlement unit by using the to-be-demolished hut as a counter with the resettlement department when the shanty-town is cleared.

Among these rural-urban migrants are those who only live in the cities seasonally and who are most likely to live in squatter areas as they do not want to invest their earnings in the expensive formal accommodation sector (UNCHS, 1996, p. 207). Angel *et al* (1983, p. 214) point out that "the important characteristic of seasonal migrants is their tendency to save as much as possible while in the city; consequently they are willing to accept very minimal accommodation" which is mostly in illegal or squatter settlements.

Migrants, notably new migrants who have limited information about cities, who often try to avoid authorities⁴ or any kind of formal procedures and activities, find squatter areas more convenient in terms of work and living than legal urban settlements. This is because in a squatter settlement or other form of informal housing bureaucratic procedures are generally not imposed on the tenants apart from some charting negotiation on purchasing or renting the properties. Business is done within a matter of hours and the buying or leasing procedure only involves the property owners and the purchasers or tenant.

For instance, Angel *et al* (1983) point out that informal housing markets operated with a more personal approach in transaction, more flexibility in arrangements, less restricted standards and regulations, and more of a communal and traditional character in the neighbourhood. An empirical study of Karachi city in Pakistan by Hasan (1992, p. 72) also supports this view as he shows that "buying a plot in the illegal subdivision or squatter settlements, is a simple affair. It involves no red tape-ism, no catering to corruption, no visiting banks and fulling other formalities, such as establishing one's identity as required by formal sector schemes". In contrast, urban legal housing markets often or always require many bureaucratic procedures and takes longer which resourcefully and lawfully disqualify most migrants.

Furthermore, squatter settlements are also places of social meeting and help centres among migrants originally from the same area. For example, in the case study of squatter settlements of Middle Eastern countries, Brunn *et al* (1993, p. 344) point out that:

More importantly, perhaps, is the role of the shanty town in integrating these largely rural migrants into the life of the city. Migrants from one village or at least one region often constitute the majority of one particular shanty town, because extensive networks exist between the shanty town and the

⁴ In most developing countries the movement of population is controlled by authorities and in some cases, migration is illegal. Therefore, migrants wish not to involve any kind of formal activities, i.e. legal housing market.

area of origin. Not only do new migrants have a place to go when reaching the city, but many relatives and friends provide aids and comfort in the new surroundings.

Similarly, Shami (1994, p. 37) shows in the case of squatter settlements in Algeria that "it was commonly the case that a large number of migrant families connected through kinship were able to settle close to each other in the goubivilles (squatter settlements or shanty towns) thus creating widespread structure of kin similar to those prevailing in the rural areas".

Migrants are also more likely to become squatters than the urban-born because they have a disadvantage in obtaining access to land and housing regardless of personal wealth. Speare *et al* (1988) and Potter *et al* (1990, p. 29) explain this disadvantage of migrants as being based on two reasons. Firstly, as newcomers to the city they lack the access to land and other resources which the native-born may have inherited or received from relatives in the city. These authors further argue that even though it may be easier for an educated and skilled migrant to find a job than for an urban-born, it may be more difficult for the same migrant to acquire land or a house in an already crowded city.

For example in Karachi, Pakistan around 50 to 70 per cent of the refugee migrants from Afghanistan reportedly belong to the low income group who cannot afford to buy houses in non-squatter markets (Van der Linden *et al*, 1991). However, even if these refugee migrants or other rural to urban migrants could afford plots or houses in legal parts of cities, there are other factors that discourage them to buy or rent in those areas. These factors could include the situation where migrants still own estates in their places of origin, or the case of those young migrants those who only reside in cities while they are studying, etc. In summary, the above discussion seems to indicate that there is a strong relationship between migration, poverty and squatting.

- The Process of Migration into Squatter Settlements:

There are two main processes of how migrants move into squatter settlements from their rural places which are often found in literature. Firstly, most migrants are believed to first move from their original rural village into inner-city slums or another form of low-income urban housing and from there to squatter settlements (Turner, 1969, 1972). Migrants move into squatter settlements after they have established themselves in the city by finding jobs, building a network of friends or kin and gaining some understanding of the political and bureaucratic structure of the city (Turner,

1969, 1972; UNCHS, 1982). That is to say, migrants are believed to have lived in urban non-squatter areas until they have some information and understanding of the city authority and its policies before they move into squatter settlements. For example, in the case study of Karachi city in Pakistan, Hasan (1992, p. 42) reveals that "new migrants usually stay with relatives until they find a job, after which they call for their families".

Secondly, many migrants are believed to migrate into squatter settlements directly from their places of origin by maintaining contact with families who remain at the first places. They may even continue to own land and service financial commitments there. This limits the resources these migrants have for purchasing land or houses in the cities, while others envision an eventual return to their places of origin. As a result, these migrants' willingness to make a major investment or commitment such as buying land or houses in cities are reduced. These cases, migrants come to cities where they directly move into squatter areas and settle there permanently. It is speculated that most of these migrants have received information from friends or kin about the city and the authorities before their migration. These early migrants then act as an information centre to those in their places of origin. They encourage their friends, relatives and others to come to the settlements to join them. Consequently, the area grows as more new migrants arrive as the UNCHS (1982, p. 27) finds that "once the original settlers have established themselves, they begin to serve as points of entry to the city for a whole network of kinsmen and friends".

In many cities of developing countries, international migrants are reported to be the main source of population growth in urban squatter areas. This massive inflow generally results from war or hostility in their countries of origin. These refugee migrants are mostly poor and they have no access to formal urban housing markets. It is also assumed that since these people are migrants, they do not receive or qualify for any government housing subsidies from which the urban-born poor could benefit. Hence, most of them choose informal or squatter housing for shelter. Most of these war refugees migrate directly into squatter settlements from their places of origins.

2.3 The Terms Urban and Rural Which Are Used In Defining The Migration Types in Literature and in This Study:

Like the terms squatting, migration, the terms rural and urban could be misleading in defining a place as urban or rural that lead to the distortion of relevant studies. It is in this consideration that

this section is set up to discuss and define the terms in the context of this study. For example, urban growth, especially in cities of developing countries, has been projected to increase at a spectacular rate especially, in sub-Saharan Africa where the growth rate of the urban population increased from 7 to 41 percent in the thirty years before 1980, while the rate in other regions of the developing world is also predicted to be as high as 40 per cent (Harris: 1990). Such predictions, however, face criticisms of being overestimation since the terms urban and rural are vague in some cases (Harris: 1990).

Among such criticisms, Lipton (1980) argues that the figures of urban growth often do not distinguish clearly enough among four factors: natural increase of initial urban population; net migration; the natural increase of the new immigrants; and 'graduation' (or boundary expansion) that causes new places to be counted as urban. He also points out that the most famous confusion is the size of the population used to classify a place as urban. As an example, he shows that census authorities in Africa and Latin America count a place as urban when the population exceeds 2,000, while in Asia the borderline is usually 5,000.

The definition of the terms is varied from one country to another and depend on also the purposes of data collection, and there has to date been no attempt to define such a term for international application. It would probably not make sense either, since each country has its own scenario. The most common criterion used to determine whether or not a place can be regarded as urban, is the size of the population (Davies, 1972; Hoselitz, 1962). For instance, in India, Hoselitz (1962) defines and confines urban areas to places with 20,000 inhabitants or more; while in Japan, Korea and Taiwan regard settlements of more than 50,000 people as urban places (Renaud: 1981). This indeed leads to misunderstanding if such data are being interpreted and used.

It is also very common that in a place which is regarded as urban, the patterns of land use are strictly regulated and different from rural areas. For example, a place probably develops from a rural to an urban centre through changes of its land use. Murphy (1971) points out that more than a century ago a small centre was an area of multiple uses like residential, small commercial, small craft or industrial, small institutions, or even small financial place, but with the passage of time and overcrowding, such a place has become the centre of an urban area since commercial and financial activities expand to include other land use patterns.

It is also true that in some developing countries people distinguish between urban and rural areas by the level of civilization (measured in the extent to which the lifestyle is Westernized like clothing, the consumption of materials and the acquisition of capital goods such as saloon motor cars, street lighting, advertisement display systems, and other facilities). Most grassroots level people in developing countries are more aware of this criterion than others in distinguishing between rural and urban since it requires a simple observation and not a high level of education or skills.

For example, if one asks an uneducated farmer or peasant in rural areas of developing countries (particularly, Cambodia) how to define a place as urban, that person will probably reply that a city or an urban area is different from his/her place because it has electric streetlights (in the case of poor developing countries), more cars, more high-rise buildings, several cinemas, restaurants, supermarkets, universities, etc., rather than point out other criteria i.e. population density. In short, the definitions of urban and rural are dependent on the purposes and interests of different studies and the purposes of using such data. In this case study, a place is considered urban (or a city) which is often as well defined by the government (interviews with experienced personnel, 1996), when it has a population of 10,000 people or higher.

2.4 Physical and Socio-Economical Characteristics of Squatter Settlements:

This section discusses the common characteristics of squatter settlements in cities of developing countries as the general picture contributing to the knowledge of the study of the issue.

- Physical Location of Squatter Settlements:

Geographically as shown in summary in Table 2-4, squatter settlements are usually presumed to be located on the outskirts of a city or on undesirable land within the city. Dwyer (1975, p. 32), Anthony (1979, p. 7), Hardoy *et al* (1992, p. 107), Simon (1992, p. 107), UNCHS (1996, p. xxix) and Main *et al* (1997, p. 12) point out that squatters tend to occupy the worst locations of a city, those offering the least resistance to their invasion such as unguarded public open spaces, stretches of land along rail-road lines, place adjacent to dumps, marshy areas subject to flooding, spots next to sewage treatment plants, or unused properties of absentee land lords and those of dangerous and polluted locations.

Table 2-4: Summary of Common Locations Founded in Different Cities of Developing Countries

Locations	Latin Amer.	Africa	Asia	Middle East
Dangerous steep hillside/mountain	Popular	Not common	Not common	Exist
Public open space	Popular	Popular	Popular	Popular
Stretches of land along rail roads	Exist	Exist	Popular	Not common
Close to/on waste dumping site	Exist	Exist	Exist	Not common
Flooding site	Exist	Exist	Popular	Not common
Polluted site along sewer	Exist	Popular	Exist	Not common
Dangerous site close to and polluted plant/factory	Popular	Exist	Popular	Exist

Sources: Compiled from various sources of authors mentioned in this study

All of these disadvantageous locations that expose the settlements to many hazards and disasters. For example, in the case of squatter settlements in Bhopal, India, James (1991, p. 117) and Main *et al* (1997) argue that because squatter settlements were located too close to the pesticide plants, thousands of squatters died during the explosion of the plants in 1984. Similarly, "in April 1993, torrential rain flooded and destroyed shanties and houses and killed at least one person in Port Sudan, Sudan" (Main *et al*: 1997, p. 8). In the same year, "April 1993, in Istanbul, Turkey, methane gas exploded at the city's biggest rubbish dump and buried a dozen shanty dwellings, killing at least sixteen people and burying up to one hundred" (Ibid: 10). Four months later in Caracas, Venezuela, "In August 1993, tropical storms caused landslides and killed over 100 people, injured hundreds and made thousands homeless in squatter neighbourhoods " (Ibid: 9).

The geographical location, however, varies from country to country. For instance, typical sites for squatter settlements in Latin American cities are steep hillsides or mountain slopes adjacent to the city like in Rio de Janeiro in Brazil, Caracas in Venezuela and Quito in Ecuador (Allen: 1988, Burgwal: 1995 and Dwyer: 1975). In South and South East Asia squatter settlements are frequently found in swamplands which are subjected to flooding like in Delhi, Karachi, Bangkok (Tanphiphat: 1983), and Phnom Penh of Cambodia and Ho Chi Minh city of Vietnam (author's research), Montego Bay of Jamaica (Eyre: 1972), Colombia (Dwyer: 1975) and Kula Lumpur (Aiken: 1981).

- Squatter Housing Condition:

It is estimated that between 30 and 60 per cent of the urban population of developing countries live either in illegal settlements (or squatter settlements) or in tenements and cheap boarding houses (Hardoy *et al*: 1990). In for example Carcas Metropolitan area, Venezuela, 61 per cent of its total

population lived in barrios (squatter settlements) in 1985 (Main *et al*: 1997), while in urban India the number of people living in such settlements is estimated at 45 million in 1990 and over 50 million by the mid-nineties (Dargupta *et al*: 1991). Most of these houses are overcrowded, makeshift, decayed or cramped, as well as being fire and health hazards (Choguill: 1987). As Moughtin *et al* (1992, p. 48) point out that "fire hazard is a constant risk in squatter areas of Nairobi, Kenya. For example, in November 1982 on one night alone 17,000 people were made homeless".

The main contributor to fire risk is the building materials used in squatter houses which are often highly flammable and toxic (Moughtin *et al*: 1992, p. 30; Dargupta *et al*: 1991, p. 210; UNCHS: 1996). The houses are generally built from cheap, unsupported materials which can be erected quickly like cardboard, sheet metal, thatch, bamboo, grass, plastic, clay, mud, leaves, paper, canvas, branches, and other materials locally available (Main *et al*: 1997, p. 126). According to Hardoy *et al* (1990, p. 18) squatter houses or similar type of settlements adversely impact on their inhabitants in mainly three ways: firstly, it provides inadequate protection or shelters from health hazards; secondly, the houses have insufficient space, security, services, and facilities; and thirdly the lack of security of tenure often discourages the dwellers to improve the housing condition. Squatter properties in the inner-city are subdivided into smaller plots which are leased or sold to other squatters and tenants. In contrast, squatter plots which are located in the outskirts of the city are larger, since they are less desirable and can be obtained at cheaper prices.

Similarly, the houses' living space also varies but the common picture is one where especially those houses located in the inner-city have only one or two rooms. One room is generally used as sleeping place and living room and the other as kitchen and dining room. The latrine and bathroom, if present, are often located outside the house. However, many squatter houses use public toilets and bathrooms, or use rivers or lakes and the vacant land of the adjacent areas as an alternative. Thus, squatter houses are inevitably overused by their inhabitants (Hardoy *et al*: 1990, p.48; UNCHS: 1996, p. 115).

- Services and Infrastructure in Squatter Settlements:

Among services and infrastructure, water supply is perhaps the most important for squatters to survive in the areas. Numerous studies on squatter settlements show that in such areas, water

supply is worse and more expensive compared to other settlement areas in cities (Hardoy *et al*: 1991, p.109; UNCHS: 1996, p. 115). Squatters often pay a high price for such a service and receive a service of very low quality (UNCHS: 1982, p.146). Even in a high income and city state country like Hong Kong, squatter dwellers still suffer from poor water supply and other services to the same extent as those in other low-income developing countries (Main *et al*: 1993, p.137).

Waste collection and disposal in squatter settlements are undoubtedly as bad as water supply. It is very difficult to measure and observe how waste is collected and disposed of as some squatter settlements are located in the waste dumping areas. Those which are located outside dump sites rarely have enough space for storing garbage. Since governments consider squatter settlements illegal, the residents cannot claim public services (Eades: 1987, p. 239). In addition, even if squatters could afford to pay for services, most squatter settlements do not have adequate road or lanes for garbage collection carts to obtain access to the whole area (Hardoy *et al*: 1991).

However, the most serious problem is the poor disposal of human excreta in squatter settlements. In some squatter settlements toilets are not available at all, as in the case of Sabarmati Riverbank, India and Tondo Foreshore, Philippine, where perhaps most squatter dwellers use the river for this purpose (UNCHS: 1982). A similar situation is reported for many squatter settlements of other developing countries where "the use of nearby rivers and creeks is popular in a number of squatter colonies" (UNCHS: 1982, p. 150). The contents of pit or bucket latrines often contaminate underground water sources, and can even contaminate whole squatter areas during rainy season especially during floods and in areas where water stagnates.

Like water supply and waste disposal, energy for cooking or lighting is inadequate in squatter areas and inhabitants have to supply it themselves. It is futile to discuss how poor squatters receive electricity from public sources since in some cities even the formal settlements and government institutions have no electricity or only for a few hours per day like in Phnom Penh city. Most squatters obtain energy for their cooking from wood, diesel or kerosene fuel, charcoal, and other cheap local materials such as animal-dug cakes which are used in squatter settlements in India and Pakistan (UNCHS, 1982).

Health and education facilities and road system, if they exist, are inadequate and squatters are often barred from such facilities because of two main reasons. Firstly, squatter settlements are regarded

as illegal so the areas do not qualify to receive these facilities from the government (Eades: 1987, p.239); and secondly, most squatters are believed to be very poor which discourage private companies to install and operate these facilities in the areas (Main et al: 1997).

2.5 Government Attitudes and Policies Toward and Its Influences over Squatter Settlements:

Government attitudes and policies toward squatter settlements are varied and dependent on the interests of individual governments. In addition, it is widely noticed that government attitudes toward squatter settlements are also dependent on the power or strength of the squatter communities or organisations, and the type of political system in the country. That is to say that perhaps in a country where democracy and human rights are respected by the government, squatter settlements are likely to be recognised and upgraded or at least be less threatened by eviction and demolition than in a country where democracy and human rights are violated by its government. These attitudes and policies also change over time as the country's political regime changes.

- The Government Policy of Squatter Clearance: Squatter settlement clearance has been widely regarded as a disastrous and inhuman solution (UNCHS: 1982). The policy exacerbated the urban housing crisis since most squatters are believed to be migrants who are too poor to afford other types of urban housing. Therefore, most observers find that such a policy, instead of reducing or controlling the growth of squatter settlements in cities, encourages squatting to spread from one place of evacuation to another as squatters have to find a new place to live. This is because they cannot afford or find it difficult to live in the new, formal housing provided as an alternative by the government. There is no doubt that such a project requires large capital investments, but squatter evacuees still find the new area too expensive even if it is heavily subsidised by government as in the case of Klarge Valley settlement of Malaysia (Aiken: 1981) and many settlements of Manila, Philippine (Hollnsteiner: 1977).

The new houses are not only very expensive for evacuees, they are also reportedly not conducive to a social relationship between the residents. This is because the relocation or resettlement areas are generally far from city centres and especially from the original squatter area. This further forces the former squatters to quit their normally informal, unskilled jobs since they cannot afford the cost of transportation (Raj et al: 1990, Western: 1995). In turn, they are cut off from the social activities they took part in the previous settlement (Frank: 1981). The squatter resettlement or squatter

clearance programme also often fails to provide its inhabitants with cultural needs. This is generally critical, particularly in Islamic countries where families' privacy is considered very important (Al-Azzawi: 1969; Khavidi: 1978).

- Other Government Policies Toward Squatter Settlements: When squatter clearance policies fail to stop the growth of squatter settlements and low income housing, governments try other strategies like squatter area upgrading or improvement, and the 'site and services' programme. The squatter upgrading programme is a new attempt of governments to better deal with squatter settlements. It is often described as "the initiative, organisational ability, and capacity for work of the marginal population in the urban community" which will achieve "the greatest social benefit with the limited resources available" (Payne: 1984, p.3).

The main feature of such a policy is providing squatters with security of tenure and other benefits like financial assistance and basic building technology so that squatter houses and the environmental living conditions in the areas can be improved (Turner: 1972, Payne: 1984). Providing security of tenure to squatters is perceived by most observers as vital to the squatter housing improvement programme. This is because squatters always fear forceful evacuation and therefore only invest relatively small funds in housing. In this programme, squatters have to pay for the land they occupy for a certain period of time, as in the case of Ismailia settlement of Egypt (Davidson : 1984) and many settlements of Mexico (Ward: 1984) and those of Begin city, Nigeria, Ozo (1986). However, many observers still argue that providing squatters with legal land tenure (which is the core theme of the policy) without an understanding of the whole concept of squatter settlements, could lead to land speculation from which only the rich and the land developers benefit (Burgess: 1982, Eades: 1987, McAuslan: 1987).

- The Impact of Political Competition on Squatter Settlements: A perhaps indirect encouragement to the growth of squatter settlements is the political propaganda of different political parties during their campaigns to come to power in developing countries. In order to obtain votes from squatters, politicians promise to legalise and improve squatter settlements if their party wins the election as in the case of India (Payne: 1977), of Turkey (Danialson & Keles: 1985), of many African countries (Eades: 1987) and other developing countries of latin America (Mangin: 1967, Main et al: 1997). In the case of Karachi, Pakistan for example Schoorl et al (1983, p. 78) report that:

On several occasions in the basti's history, upon insistence of the Housing Society, the urban authorities Karachi Metropolitan Corporation (KMC) attempted to evict the basti dwellers and sent in the bulldozers of the demolition squad. However, again and again, the inhabitants managed to postpone the execution through demonstrations and legal steps, in which the help of politicians and other influential people was involved.

In order to gather votes squatters normally have to organise themselves into a consolidated community to show political parties that their votes are already assembled and weighs enough to help pave the road to electoral victory (Eades: 1987). However, few politicians keep their words after coming to power. There are many examples where squatters (and non-squatter alike) have been cheated by political parties and politicians who fail to provide squatter settlements with the promised infrastructure and services. One of the bitter examples is the case of squatter settlements in Karachi, Pakistan as Schoorl et al (1983, p. 85) report from the squatters' interviews:

The government always promises us all kinds of things, and always we hope that they will do something for us. But every government finishes its term and disappears. And after each term, nothing has changed in our situation. We can no more trust any government. We can no more believe that the government will do something for us. During election campaigns they always promise. Several times, they have promised us that they would regularise our colony, but nothing ever happened. They only say so to gain vote.

2-6 Summary:

The term squatter settlement is commonly defined as an illegal settlement in which land or a building is occupied unlawfully. The person who is involved in such a settlement is called a squatter. This sort of settlement is formed and developed in various ways from one place to another. It is often reported that the fast growing urban population of many cities of developing countries is the cause of squatter settlements.

It is also generally found that squatting is usually of two main types: organized land or building invasion and land accretion. The former is found to be common in cities of Latin American countries while the latter generally occurs in cities of Asian and African countries. In terms of the type of squatter settlement, this study concentrates on illegal land occupation or direct squatting since this type involves a large proportion of the population in Phnom Penh city. Other types of squatter settlements house a smaller section of the population and are scattered in the city which make it difficult to carry out the field survey. Squatter settlements are found in various places in cities, i.e. in inner areas and suburbs. However, it is generally believed that squatters often choose

sites for squatting where the risk of confrontation with land owners and authorities are lower regardless how dangerous such areas.

The term migration is defined as the movement of people from one place to another where they live in the latter place continuously for at least more than six months. There are commonly seven types of migration which often found in literature, although rural to urban migration is the most attractive subject for discussion in most literature. In the context of this study, however, intra-city migration where applicable is incorporated in each of the remaining four types discussed: rural to urban, urban to urban, returning migrants and immigration.

There is no description which exactly represents the common characteristics of squatters. Their characteristics vary from one place to another depending on culture and custom of living. However, it is often found that the majority of squatters are of a low educational and skills level, engage in urban informal sectors and have low incomes. The incidence seems to be higher where squatter settlements are the haven of refugee migrants and new rural-urban migrants.

On the relationship between squatting, poverty and migration, it is reported that migrants (particularly new migrants) are more likely to become squatters than non-migrants and long-term migrants. This is due to the fact that they are believed to be poorer and wanting to live close to relatives or friends. They therefore generally only assemble in squatter settlements as these are affordable to them. The very simple ways of obtaining accommodation in squatter settlements (no legal procedure or laws are employed in buying or renting houses in squatter settlements) is also an important factor for migrants likely to become as squatters.

This is because government low-income housing programmes normally provide few chances for migrants and other low income groups in two main ways. Firstly, it requires so many unnecessarily bureaucratic procedures that migrants and low income groups are often disqualified, sometimes simply because they cannot afford to wait the time required to comply with the procedures. Secondly, migration is in many cases regarded as an illegal movement by government authorities and as such usually precludes migrants of qualifying for government low income housing programme aid and other benefits (if there is any such programme available).

It is noticed that the majority of migrants are believed to move into squatter settlements only after they had lived in other parts of cities for some times with their relatives or friends. Migrants' relatives or friends are also important for them not only to obtain important information about the squatter settlements, but often also to help them build the squatter huts as well. Such help is even vital especially for the immigrants to survive in the new and illegal parts of cities.

The characteristics and the living condition of squatter settlements commonly represent the worst part of the city. It is characterised by poor environmental living conditions, high rates of diseases and other hazards, and inadequate basic infrastructure and services. The majority of writers and commentators have argued that this poor condition in squatter settlements is not because squatters have no ability to improve their settlements (although the majority of them are poor, they can still do so step by step according to their resources) but rather that the lack of security of tenure and the threats of eviction from government authorities are the main obstacles to such an investment in the environment.

Finally, despite the continuous threat of eviction and demolition, squatter settlers reportedly receive some benefits from political competition as leaders of various parties help squatters to legalise the settlement in exchange for votes. As a result, infrastructure and services are installed in squatter settlements or the whole area could even be provided with security of tenure. However, there are also many other cases where squatters have been cheated by politicians and nothing had changed in their settlements.

Chapter Three: Methodology of Sampling Fieldwork

Introduction:

This chapter is designed to discuss the framework and methodology of the study. It starts with the author's argument on literature review from which the research questions of this study have emerged. Based on these questions, hypotheses can be drawn and will be tested by conducting a field study in Phnom Penh city. The chapter has 7 sections. Section 3-1 examines the data collection process, concentrating on the methods which have been used and the choices of the studied settlements in the city. It also discusses the choice of the studied city, the selected squatter and slum settlements, the criteria for the interviewed population and the chosen numbers of the interviewees.

Section 3-2 discusses the survey research including the method and sampling and the sampling design of the study. Section 3-3 provides the analysis of the design of the questionnaire which is to be used during the field work in order to collect primary data for this study. Section 3-4 discusses the structure of the questionnaire in order to make it practical and viable and understandable to both the interviewers and the interviewees. It also analyses of how to make the questionnaire in logical and managerial orders so that the questionnaire will not confuse or repeat the questions to the interviewees. The section also provides the discussion of two questionnaire formats for interviewing squatters and slum settlers due to some different questions for the two type interviewees.

Section 3-5 discusses the processes of the interviewers' recruitment, their training and the process of pilot testing the questionnaire in order to find out whether it is practical and viable and whether the data which obtained from the interviews are sufficient for this study or not. Section 3-6 provide the administering of the field work or in other words it discusses the process how the field work should be guided and carried out successfully. Section 3-7 discusses the difficulties and experiences during the fieldwork. Finally, section 3-8 provides the discussion of the computer programme which is used to analyses data of the field study including the option of choosing SPSS software package, questionnaire coding, data entry and data analyses.

3-1 Data Collection:

This section discusses and lays out the strategy and method of collecting data and information of both primary and secondary data in order to make the research possible. This data collection strategy includes the method of collecting data, choice of the place which data are being collected including the choice of city, the squatter settlements and slum settlement, and the choice of interviewed population.

3-1.1 Choice of Method:

In the study of Social Sciences, there are a wide variety of survey methods of data and information collections. Many of these common methods are experiments, surveys, histories and the analysis of the archival information (Hakin: 1987). However, this study is carried out based on the analysis of archival information for Chapter 1 and 2 and the survey method for the finding Chapters 4, 5 and 8. This is because¹:

- Experiment method is inappropriate as it used for chemical or physical science mainly in the laboratories;
- History method is also less irrelevant due to the circumstance that this study focuses on the question of why do squatters squat and not on how and when the squatter settlements have been formulated. This is because history method is mainly conducted for the study that investigates on the events which had happened in the past. However, it is employed in the early parts of Chapter 1 of this study to gather historical information about Cambodian history in general.
- The analysis of the archival information is also only employed in many of the literature review Chapter 1 and 2 for this study. This is because the study mainly concentrate on the new finding factors from the squatters which must not have been done before. Yet, the method is also used in collecting secondary data and information on the numbers of squatters and relevant issues for this study as well (early sections of Chapter 4).

¹ This is also because, the use of different methods in combination, in which the strength of one compensates for the weakness of another, and the potential for linking them, which was initially christened by Campbell & Fiske (1959), and its usefulness was stressed by Miller (1991), who calls for attempts to strengthen the validity of empirical evidence in the social science by reliance on more than one approach.

Thus, two main different methods of data collection are employed in the field research: first, secondary data collection of the general information of squatter settlements in the city such as: the total number of squatter population in the whole city and that of each district and each sub area, and other relevant information which have been carried out by the government institutions, International Organisations, and NGOs. Second, two parts of interviews are carried out in the squatter settlements and the slum area in Phnom Penh city. These are the primary data collection which aim to test the research's hypotheses as later shown in chapters 4, and 5 of this thesis.

3-1.2 Choice of the city:

The reason for choosing Phnom Penh city as a case study of this research due to the fact that:

- Phnom Penh is the capital of the Kingdom of Cambodia (see Map-1), the centre of economic activities and facilities and the major industrial city of the country which can attract migrants the most compared to other cities of the country as the cases of other big cities in the developing world. Hence it is the appropriate place for this study.

- Data and Information on squatter settlements and relevant issues are available and more reliable compared to other cities in the country. Such data and information were especially collected in recent years (1997) by the city authority, the university of Royal Fine Art with the help from international organisation and NGOs. This is a very crucial factor for this research especially for the field study which base on some of these secondary data and materials like maps of the squatter and slum settlements for example.

- Since Phnom Penh is the capital and the biggest city in Cambodia, its demographic population particularly its squatter population can represent the whole picture of a type of population such as rural-urban migrants, urban-urban migrants, intra-urban migrants, im-migrants and especially the returnees migrants. This is also equally important for this study, because the field survey can provide data to test the research questions and hypotheses of the study (As discussed in Chapter 1).

3-1.3 Choice of Squatter and Slum Settlements in Phnom Penh

The selection of the studied squatter and slum settlements was made long before my field trip to Phnom Penh. The decision to choose only three largest squatter settlements and one well known (to of course Phnom Penh population) slum settlement was also long been discussed among professional friends and many experienced Cambodian experts as well. One of the most important factors for choosing the three squatter settlements, as shown in Table 3-1, is based on the fact that the settlements' population composition can be representative to the rest of other squatter settlements of the city. Therefore, the result of the survey can contribute the understandings of the squatter issue to most of other relative smaller size squatter settlements of the city.

Table 3-1: Important Factors for Choosing the Studied Settlements in Relation to Other Squatter Settlements of Phnom Penh

Factors	What could be feasible and representative to other settlements of the city
Size	The largest which could produce feasible and significant surveys
Location	Different geographical locations which could represent other areas
Population composition	Comprised with all types of population i.e., the Vietnamese, new and long term migrants, migrants from all parts of the country, etc.
Reasons for squatting	Judging from the author's experience and the informal interviews and talks with the government officers that different squatter areas might be invaded for different reasons.
Dates of invasions	Different dates of invasions also might represent different purposes of squatting
Price of lands	Different land prices of the invaded areas also affects different purpose of squatting

Source: Author's source with consultation from varied professionals and supervisor.

Knowing that the composition of the three squatter settlements which are locally known as Bassac River, East Preah Monivong Bridge and Boeng Kak squatter settlements, are based on the available data compiled and updated by local authorities in co-operation with International Organisations (as shown in Chapter 1). In other words, judging from all the list of squatter population composition of most settlements in Phnom Penh, the population composition of the three mentioned settlements could be representative to most of the smaller squatter settlements of the city. This is because as shown in Chapter 1, the population of two of the studied settlements encompasses the Vietnamese immigrants and the returnees from Thailand which could represent other settlements of the city that have similar population composition. The third chosen settlement, as also shown in Chapter 1, does not have the Vietnamese immigrant which again represent other settlements that have similar population composition.

Nonetheless, the geographical location of the three squatter settlements also have roles in the decision making of choosing sites. Each of the chosen settlement locates in different part of the city physically and financially- on the suburb and was squatted on public properties, on the centre in the commercial and business zones and was squatted on public and private properties, and on the city's central amusement park and was squatted on public properties. Such different geographical locations which immensely impact on the price of lands could also provide different pictures of the studied issues: different reasons for squatting, different socio-economic characteristics of squatters, etc. In other words, the author suspects that the reasons for squatting or living in squatter settlements differ from one settlement to another. Similarly, squatters of one settlements also have different socio-economic characteristics from the other.

Moreover, geographical differences of the three squatter settlements also provide different physical housing conditions, environmental living conditions and the different levels of infrastructure and services. For example, the Bassac River squatter settlement where locate closed to Bassac River provide its settlers close access to water supply and better services and infrastructure due also to its centre location. While East Preah Monivong Bridge settlement provide similar close access to water supply to its residence, but with much poorer access to service and infrastructure. This is because the area locates in the suburb and less developed parts of the city. Boeng Kak squatter settlement is another picture where it locates closed to the Boeng Kak lake in the city's centre, but the lake's water is undrinkable. This is because the lake is used as the hospital water waste disposal pool. These different physical locations could represent other settlements which lay in similar positions in many different parts of the city.

The decision for choosing the three settlements also based on the ages of invasion of the areas as well. It is noticed that squatting has been existed in Phnom Penh only after the collapse of the Khmer Rouge regime. It did happen before the Khmer Rouge regime, but then was completely uprooted by the Khmer Rouge as in that period all cities and towns were emptied and left dead². Therefore, squatting has revived only after the collapse of that regime when all cities were allowed to be resettled. The three chosen settlements were believed to be invaded indifferent times. For example, the East Preah Monivong was invaded (Interviews with experienced personnel) perhaps since as early as 1979, because Bassac River settlement was invaded (Interviews with experienced

² See more details in Chapter 1.

personnel) perhaps since 1989, while Boeng Kak settlement was invaded (Interviews with experienced personnel) in the recent year of 1993. Again, these different times of occupation of the three settlements could represent others that have existed also in different periods.

These different years of invasions are significantly related to the changes of the political situation of the country from which most squatters are accused by the government as the opportunists and land speculators rather than those who squat for desperate needed purpose. For example, in 1989 when the then government declared recognition of private properties' right, many areas of the city were subjected to illegal occupation including some parts of the Bassac River settlements. Then between 1992 -1993 when the country prepared to hold national election at the first time after many decade of civil and foreign invasion wars, squatting in the city was at it highest rate. It was at that period that the Boeng Kak settlement was also invaded. In sum, the three chosen squatter settlements are representative to the rest of squatter settlements of the city are also according to the time invasion.

The selection of slum settlement is based on the purpose of cross-checking (triangulation). This is because, the basic feature of methodological triangulation is the combination of two or more different methods in the study of the same empirical units. Such an approach allows one method to complement the other in terms of the interrelationships of problems, theories and methods (Denzin & Lincoln, 1994). Labowitz & Hagedorn (1981), Miller (1991), Oppenheim (1992) also argue that the cross- sectional survey design is a quasi- experimental approach to social scientific inquiry which compares two or more units at one point in time. In addition, Fick (1992) suggests further that the value of methodological triangulation is apparent, not least because the weakness of one style may be balanced against the strengths of another style.

The slum respondents' answers are later cross checked (triangulated) with those of the squatter respondents. For example, the reasons for squatting or living in squatter settlements which are obtained from squatter respondents are cross-checked with that of slum settlers. This is because, as mentioned in Chapter 1 that if other non-squatter population who are as poor as those squatter or even poorer, why do they not squat? Are squatters the poor and even the poorest population in the city?. Correspondingly, slum settlement is chosen due to the above factors that the poorest population is needed to be chosen. Thus, Boeng Salang slum settlement which is well know as one of the poorest settlement of Phnom Penh is chosen. This can meet the criteria above that the

chosen non-squatter settlements home to the poor of the city that can be examined against the squatters.

3-1.4 The Target Population and the Number of the Interviewees to be Chosen

The main objective of this research study is to find out the liveliness of being a squatter, hence the target population for interview is for all sex, races and ages from 16 and over until 65. This ages target is due to the fact that people who under the age of 16 is not recognised by law for their own activities. For example; those who are under 16 year-old, are not prosecuted for their illegal act or they are not entitled to involve in any kind of transaction according to Cambodian law. While a person who reaches the age of 70 is already retired from job and daily life. Therefore, in order to get accurate, un-bias and more responsible responses, this study determines to focus on the above criteria, regardless family status (head of the household, wife, children, etc.), sex and ethnic of the interviewees. Moreover, the target population had to live in the chosen squatter areas in Phnom Penh city and in the chosen low-income non-squatter (slum) areas.

As mentioned early that in order to cross-check (triangulate) the result of the findings, the study also chooses poor population in slum settlements as the target interviewed population as well. Thus, the survey is carried in four settlements comprising three squatters and one slum settlements. Statistically, the sample size according to Meier & Brudney (1987), is influenced by three factors: firstly, the acceptable margin of error; secondly, the confidence level desired; and finally, the standard deviation of the population. However, the three factors are often overshadowed by the fact that: firstly, it is unusual to base sample size decision on the need for precision of a single estimate, since most survey studies are designed to make a variety of estimates; secondly, it is unusual for a researcher to be able to specify a desired level of precision in more than the most general way (Labovitz & Hagedorn, 1981; Hoinville & Jowell, 1987; Fowler, 1993). In reality, as Zarkovich (1984) points out “the size of the sample is more a matter of convenience (such as 1 to 10 per cent) or routine (3 to 5 per cent usually discussed in books and often applied in past surveys) than of real justification”.

The number of respondents to be interviewed were decided to be 70 respondents for each settlement where the total number is 280 respondents and is equal 4.43 per cent to the total 6,324 total households. This is because of the personal time and resources limited of the researcher. It

was also based on the view that the equal chosen numbers of interviewees for each settlement would give the researcher the advantage and important in doing comparative analyses among the four settlements in the finding discussion.

3-2 The Survey Research

In the field of social science study, there are numerous survey methods of data and information collection. For example, as shown in Table 3-2, methods are used in this study according to different purposes of data collection and analyses. The aim of such methods is trying to obtain the answer from interviewees who have presumably undergone experiences that are relevant to the testing of the research hypotheses and answering the research questions of any particular research subject (Fowler: 1993). Moreover, as Marsh (1982) points out that the survey is not just a way of gathering information, it is rather a distinct design for systematically collecting and analysing social research data. These research methods include interview by mail, telephone, personal interviews and group administration. It is true that researchers may choose any one of the many methods or use as many methods as appropriate depend on the nature of the research and the viability of researchers' finance and time (Moser & Kalton, 1979; Shipman, 1988; Babbie, 1990; Fowler, 1993).

Table 3-2: The Methods Employed in this Study

Types of methods	Purposes of using methods
The analysis of archival information	Used to analyse and examine the issue of the study in Chapter 1
	Used to analyse and discuss the reviews of the literature in Chapter 1 and 2
	Used to describe and discuss the important background information on the studied settlements in Chapter 1
The survey method	Used to find out what are the socio-economic characteristics of the studied settlements in Chapter 4
	Used to find out what are the socio-economic characteristics of the studied population in Chapter 4
	Used to find out and examine what are the reasons for squatting of the studied population in Chapter 5

Source: Author own source

3-2.1 The Method

The research method which is used in the field survey study is personal interview method where by the interviewers face to face ask questions which are designed to produce answers which are relevant to the testimony of the research hypotheses of this study. Although, there are variety of

survey methods of data collection in the social science study as mentioned early, the main reason for choosing the personal interview method is due to the fact that this method is the most appropriate way to conduct a survey in squatter settlements where other methods like telephone, mail and group administration are impossible.

They are impossible to be used because: first there is no telephone available in squatter settlements; second, there is no specific address of individual squatter house which is impossible to conduct the mail survey. Even if squatter houses' address are available and reliable, the mail survey that do not follow up procedures, according to Herberlein and Baumgartner (1978) the rate of response is likely to be less than 50 per cent of the total sample. Yet, follow up procedures to increase the rate of responses are to be lengthy and therefore not feasible for this study due to financial and time constraints; third, administration method is also too formal and directive for squatters. As Sudman & Brannburn (1982), Billiet & Loozveldt (1988), Babbie (1990) and Miller (1991) view that if the potential interviewees are presumed to be of poorly educated, with reading and writing skill less than good, and if the average level of interest and motivation are estimated to be low³, it is preferable to employ the personal interview method.

Personal interview method is appropriate for collecting data and information in squatter settlements in Phnom Penh is also due to the view that interviewers may get more honest answers and is the most effective way of enlisting co-operation from most respondents than other methods (Sudman & Bradburn, 1982; Guenzel *et al*, 1983; Billiet & Loosveldt, 1988; Babbie, 1990; Miller, 1991). This is because interviewers can face to face explain the reason for conducting such interviews which are used purely and confidentially for only purpose of this study. This method which produces more honest answers (although triangulation is also used) is also because generally squatters are very sensitive and frightened to answer any question to strangers, especially to the government authorities. Even if they do, their responses are inaccurate or unfaithful, which can be misused in this study. Thus, explanations from the researchers help them to understand the purpose of the conducting the interviews and the assurance for treating their responses confidentially. This is because, firstly, rapport and confidence building are possible (including written reassurances that may be needed for reporting sensitive material); secondly, interviewers are able to answer

³ This often happens in the case where respondents had been interviewed for many times already from which the interviewees feel reluctant to be interviewed again.

respondents' questions, probe for adequate answers, accurately follow complex instructions or sequences (Sudman & Bradburn, 1982; Guenzel *et al*, 1983; Billiet & Loosveldt, 1988; Babbie, 1990; Miller, 1991).

The method also allows interviewers more or better control over the interviewing situation. This enable the interviewers to make important decisions like who actually answers the questions, whether the answers are what the questions asked, or whether the questions are completely understood by the interviewees, etc. Moreover, it allows the interviewers to collect supplementary information that is important in establishing the time order of the events and relevant to the topic of the research which are not included in the questionnaire, or help to interpret the results during the data analysis stage easier and more logic. The method also allows the interviewers to employed the multi- method data collection techniques including observations, visual clues, and self- administered sections (Sudman & Bradburn, 1982; Guenzel *et al*, 1983; Billiet & Loosveldt, 1988; Babbie, 1990; Miller, 1991).

It is acknowledged, however, that the method also has its weaknesses such as: it is likely to be more costly and total data collection time period is also to be longer than other methods, the vulnerability of the interviewees' and interviewers' bias (Sudman & Bradburn, 1982; Guenzel *et al*, 1983; Billiet & Loosveldt, 1988; Babbie, 1990; Miller, 1991). In addition, other personal factors of both the interviewees and interviewers also can negatively affect the results of findings as well, as Nachimias and Nachimias (1992) point out that even when verbal communication is avoided, non-verbal communication or factors such as the gender or the race of the interviewers may influence the respondents.

Keeping all of these weaknesses in mind, the author of this study can proceed the field work including training the interviewers more cautions which can reduce the above weaknesses or the level of irregularity of the interviewees' response during interviewing process. Additionally, further measures to ensure that bias are not introduced in the handling of the inter-personal aspects of the interview, are presented during the interviewers' training. Therefore, interviewers are instructed to ask the questions to the interviewees as they are worded, in order to avoid conveying personal views or giving any indication that might affect the answers of the respondents. There are four main steps of preparation to conduct the survey research. First, is the sampling of the field-work; second, is the questionnaire design; third, is the interviewers' training task; and fourth, is the fieldwork

procedures. These four steps, indeed, are the crucial factors of the field study without which the aim of this study will never be met. These four steps of work are discussed in detail as follows.

3-2.2 Sampling

In social science there are two forms of sampling methods which are often distinguished as: non-probability and probability sample. Firstly, non-probability sampling, sometimes called purposive or judgmental sampling, depends upon the researcher to judge which sample should be selected, choosing what seems typical, relevant or interesting. This type of sampling method is employed when a population cannot be specified precisely (Miller, 1991), or when probability sampling would be prohibitively expensive (Babbie, 1990). Secondly, probability sampling, by contrast, eliminates as far as possible, the judgement or bias of the researcher. This method is often called random sampling because at its most refined, each member of the population is given an equal chance of selection (Moser & Kalton, 1979; Babbie, 1990; Henry, 1990; Miller, 1991).

In the case of this study, therefore, the aim of the sampling process is to choose a feasible model of the vast target studied areas of squatter settlements and slums of Phnom Penh city. That is to say, to choose a sample i.e., the number of the city's population, the size of the studied areas, the number of houses of the city, and so on, which can be practically studied by researchers within their limited time and financial availability. It is not only that the sample is feasible, but it must also represent the whole picture of the target studied area, i.e., the number of the city's population which is chosen to be the sample must represent or cover all types of people in that city, etc. As Nachimias and Nachimias (1992) argue that the sampling process is the selection of a subset of the population (for example for anthropological study) that accurately represents the relevant attribute of the set. In other words, the validity of any research findings is directly linked to the level of representativeness of the sample.

In this research a random method is used. This method gives equal chances to squatters to be interviewed without unnecessary bias. However, three biggest squatter settlements of three different districts of the city are chosen for this study. Since these squatter settlements are the biggest ones in the city, they have all types of population that could be representative to other squatter settlements of the city which are relatively smaller in size and population. The random numbers are received from the computer programme-called Quattro Pro.5. 360 random numbers

are taken by the researcher for the 210 squatter population and for the 70 slum population and another 80 reserved numbers (20 reserved respondents for each settlement).

This is to prevent the overlapping numbers in the provided cells of the computer. This random method is feasible for conducting the research due to the fact that fortunately the list of squatter households in the city is available for the whole seven districts of the city which has been updated yearly by the government, international organisations and NGOs. From this list, a quota of units in each of the randomly selected areas is chosen and a set of procedures is also given to the interviewers so as to ensure the randomness of the process of selection of the units are to be interviewed. However, during the field survey, the actual family lists are slightly different (the numbers of family are missing due to either technical error or the sudden move out of the areas of the population) from that of the authority and the NGO. This leads to the use of the reserved sampling as mentioned early.

3-2.3 Sampling Design:

Although, the number of squatter households is available and is also mapped, all squatter houses have no number which is impossible to conduct the survey. Therefore, a multi-stage sampling design is required in order to select units of sample. According to Moser and Kalton (1971), the multi-stage sampling is based on the conception that a population can generally be regarded as comprised of a hierarchy of sampling units of different size and type. The multi-stage sampling according to Fowler (1993), moreover, comprises of linking the units in some kind of grouping that can be sample in the first stage of the process. Then, a list of the units of each group is made and a further sample is selected as the second stage of sampling. The process could be repeated dependent on the different research situations. In this research, there are two steps to be conducted for selecting randomly the units to be interviewed.

-First, all houses in all the three squatter settlements are numbered by the researchers from No. 1. until No. 6.324 (as the total squatter households is 6.324). This numbering process begins from the first squatter house of Bassac River in Chamkamorn district as number No.1, followed by the first house of Boeng Kak in Daun Penh district, and end with the last house in East Preah Monivong Bridge in Meanchey district. This category of districts which is started from Chamkarmon district

as the first district in the rank and ended with Meanchey district is purely random by using the random method of lottery.

This method is done by writing the name of each of the 3 districts in the small paper and rolling them over so that they are all invisible. Then all the 3 papers are put into a bowl and mixed up until they are unrecognisable. Finally, each rolling paper is being randomly picked up which the first district to be chosen for starting the list of the table is Chamkamorn district follow then by Daun Penh and Mean Cheay district.

-Second, the total sampling number of 210 squatter households to be selected are randomly chosen from the total squatter household number of 6.324 households by employing random numbers that obtained from a computer as mentioned in early section. Moreover, the research in this study adopts that if the selected unit of sample is unable to be interviewed (due to whatsoever reasons), the reserved unit (20 reserved respondents for each settlement) is chosen to be interviewed alternatively in order to avoid the uncompleted questionnaires. This process is repeated until the total numbers of the sample size is completed (Fowler: 1993).

The study also rules that any one who is a member of the chosen squatter households aged from 16 to 75 who is available in the field study areas can be interviewed. This is because these mixture of households structure interviewees provide all types of respondents that could represent all types of squatter dwellers, i.e.: housewives, children of the households, etc.

3-3 Questionnaire Design:

Indeed, the questionnaire is important to collect data and information during the field study without which primary data and information are impossible to be achieved. This questionnaire is designed based on the variables that are to be measured. In the case of this study, there are three main variables: the reason for squatting or living in squatter settlements, the status and type of migrant squatters, and the socio-economic characteristics of squatters with the reason for living in squatter settlement. These three main variables that must be used to design the questionnaire; and the questionnaire likewise must produce data and information which can be measured these four variables. In other words, the questionnaire must be translated the objectives of the investigation into questions.

It also true that the quality of the questionnaire design in most of the research studies determine the reliability and validity of the research findings. Hence, in order to achieve high quality of the questionnaire design, all aspects such as: question format , sequence and wording, interviewee approach, questionnaire length and appearance and coding, must be taken into consideration with regard to reliability and validity of the information that will form the basis of the research findings and conclusions (Osgood et al: 1957; Berger and Patchner: 1988; Nachmias and Nachmias: 1992; de Vause: 1996). Many steps are employed in this questionnaire as follows:

-It is important to write down on the paper all questions which supposed to be asked to the interviewees so that the interviewers will ask them as worded in the questionnaire and not by their own intervention. Writing down questions on the paper will also keep the interviewers from messing around during interviewing period or from passing away from the subject of this study, as often this process happened.

-The sequence of questions is fixed so that any variation in the interviewees' answer may be regarded as a consequence of differences between the interviewees and not of variations in the interviewing process. This can also reduce the random errors (Shipman: 1988; Fowler: 1993).

-Words which are written in this questionnaire are of course in Khmer language (The sample in Appendix 2 has been translated into English) so that the interviewers clearly understand. These words are carefully selected to be comprehensible by all groups surveyed, and those terms which are open to other interpretations are avoided. Vocabularies, phrases, sentences, etc., which are used in the questionnaire must be simple and correct in order to reduce systematic errors or confuse or complicate interviewees which again lead to misunderstanding and jeopardise the findings (Sudman & Bradburn: 1982; Turner & Martin: 1984; Oppenheim: 1992; Fowler: 1993).

-In this questionnaire, some questions are close ended, others are open ended. Questions which are close ended, are the types which answers, are not expected to be in a wide variety differences, while those with open ended are the types which answers are expected to be varied. This aims to prevent wrongly collecting answers from the interviewees to only limited provided answer lists of the questionnaires which are prevented by the researcher. Therefore, the interviewers are strongly advised to write down as much as possible all the answers which obtain from the interviewees

during the process of interview, especially for those answers which are not listed in the questionnaire.

-In order to reduce further unnecessarily errors during the interviewing process, all questions are designed to avoid influencing the interviewees. That is to say, leading questions are prevented, as Berger and Patchner (1988, p. 28) point out that "A leading question is one in which the answer is implied in the questions. These questions lead the respondent on". In this case, the interviewees may be biased in favour of answers they believe will please the interviewers. This if happens will distort the answers of the interviewees and jeopardise the research findings.

3-4 Questionnaire Structure:

There are two types of questionnaire which are employed in this field-study. The first one is designed and used for interviewing the squatter households. The second one is for interviewing the non-squatter households of the slum settlement in the city. Both of these two questionnaires' type are discussed in detail as follows.

3-4.1 Questionnaire Format for Interviewing Squatters

This first types of questionnaire has 43 main questions (see Appendix-I), and is divided into five parts. This division is due to the fact that this field-study tries to test the four hypotheses of the study from each part of the questionnaire (except the first part) which is concentrated on each hypothesis. In other words, each part of the questionnaire is designed to test or to gather data and information for testing each hypothesis of the study. By doing this, the result of interviews will not be confused or overlapped, and the questions are more systematically.

First part is the general background and some important history information of the individual interviewee who lives in squatter settlement in the city. This part contains 7 questions which starts from the interviewees' family status, and ends with the period of staying in the city of the interviewees. This last question is very important in the sense that it will tell the status of migrants or non-migrants (i.e. new-comers, long-term migrants, or the returnees, etc.) in the city.

Second part is concentrated on the reasons for migrating into the city and the reasons for squatting or living in squatter settlements. This part comprises 10 questions. It also collects information on how interviewees (or squatters) migrate to the city and how then they move into squatter settlements, and what is their main perception of squatting or living in squatter settlements, and how do they see their future of living in those areas?

Part three has 6 questions and focuses on the squatter housing conditions and the squatter estate property. It also tries to cover the point that whether squatter settlers have other estate properties in somewhere else in the city. This part will also give the data and information on how squatter dwellers get lands or houses in the squatter settlements (i.e. by direct squatting originally, buying or rent from the previous squatters, etc.), and also to testify whether the main reason for squatting is because squatter settlers have opportunities to do so (i.e. for speculation because there is no legal action against them, etc.) and perhaps squatter settlements are just their temporary shelter since they already and still own another houses (or house) in other part of the city or some where else in the country. However, the real answers depend upon the squatters' response.

Part four is made up by 5 questions and focus on the educational attainment and employment status of the interviewees (squatters). This part aims to testify whether the level of education and job status of squatters are the main factors for forcing them to live in squatter settlements since they earn not enough income to support them even the cheapest accommodation in the legal urban housing markets. It also attempts to answer the issue that what types of jobs these squatter settlers are employed (i.e. informal or formal workers)

Part five has 15 questions which focuses on the property and income level of squatter households. The researcher acknowledges that this part could be a sensitive part for squatter settlers to honestly answer the questions. That is why this part has more questions than other parts as to avoid of asking squatter interviewees bluntly about the level of their income and property. Moreover, many important and significant and valuable asserts are included in the questions, in order to find out whether squatter settlers have any other supplement incomes to their main incomes obtaining from daily activities such as salaries. However, as space is limited, many of the information and data are unable to be analysed in the finding chapters of this study.

3-4.2 Questionnaire Format for Interviewing Non-Squatters (Slum Settlers)

This second type of questionnaire is prepared for gathering information mainly on non-squatter households who live in urban legal housing areas in the city. As mentioned early that the main purpose is to check with the slum settlers why they do not move into squatter settlements or whether they think to squat or not to squat, if they are as poor as those who live in the squatter settlements. In the case the slum interviewees want to squat, then they will be asked why and how. In the case the response is do not want to squat, then they will be asked why. The results will be used as cross checked with those of the squatters. Therefore, the sample is chosen in the poor or low income areas in the city. There are also 43 questions in this second questionnaire to be asked (See Appendix-II).

First part of the questionnaire which contains 7 questions which are the same as those of the first type questionnaire. Second part of the questionnaire which also has 10 questions focuses on the reasons for migrating to Phnom Penh and the reasons for planning to or not planning to squat or live in squatter settlements of the slum interviewees. The rest of the questions of this part aim to collect data and information as in the same direction as those of the first type which is for asking squatters. Part three, four and five of this questionnaire for interviewing the slum respondents are as the same as those of the first type of questionnaire which are used for interviewing squatter respondents.

3-5 Recruitment, Training and Pilot Testing

As mentioned earlier that the researcher has worked in the city since 1991, and has known many friends working with the municipality especially dealing with the city housing issues including squatter settlements, therefore, most of these friends who have already experienced with surveying in the other squatter areas were chosen to help in conducting the survey. There were six friends (all of them are civil engineers) who kindly help the researcher in both of collecting secondary data and conducting the interview. Two other are the researcher's brother (one civil engineer working with the ODA and UNDP in co-operate with Phnom Penh Municipality which dealing with squatter issue, and one architecture who graduated before this survey was carried out, and who used to conduct the survey in squatter areas in 1994 on the general subject of living condition and saving

viability of squatter community in Phnom Penh) had also helped in collecting and conducting interview as well.

Since all of the chosen interviewers (9 of them) were already experienced in the squatter survey, only two days of training were conducted before the pilot testing took place. During the training period all interviewers were invited to express their own experiences (both difficulties and remedies) in conducting interview with squatter settlers in the previous works that they had done. All questions in the questionnaires in this study are all open to the team for discussion and criticised as well in order to make them manageable and practical for the field interview. At the same time, theoretical tasks which are suggested by many scholars such as: Firstly, to locate and enlist the co-operation of the selected respondents; Secondly, to motivate respondents to be a good respondents; and finally, to be a good question asker answer recorder, providing a constant stimulus, asking questions in a standard way, and ensuring that answers meet question objectives (Guenzel et al, 1983; Hoinville & Jowell, 1987; Billiet & Loosveldt, 1988; Babbie, 1990; Miller, 1991).

It was at that discussion that some words, phrases sentences and the structure of the questionnaires were suggested to be changed by the team. The researcher was also suggested by the team to change the words "squatter or squatting" in Khmer language to the words "poor community" due to the fact that the interviewers (excluded the author) had understood in their previous works that squatter settlers do not like to be called as so, and if the words are not changed in the questionnaires, it could damage the environment of the survey and can become as an enemy to the squatter community. This is so, because squatter dwellers never regard (intentionally) themselves as the word "squatters" but they prefer to be called by the word "poor" community.

Since the questionnaire for slum settlers as that of squatter dwellers, the pilot testing is chosen for squatter dwellers who numbers are in triple compared to the sample of slum settlers. After training session, all the interviewers including the author (10 interviewers) went to Boeng Tra Beck- one of the squatter area in the city to conduct the pilot testing. Each one of the team, during pilot testing was asked to conduct the interview while the rest had to observe and make notes for the weaknesses or ineffectiveness of other suggestion of interviewers. Each interviewer was also asked to conduct three interviews during the time, hence there were 30 questionnaires which were analysed and discussed during pilot testing. There only one question was changed in the

questionnaire after the pilot testing. Hence it was agreed by the team that the questions and the structure of the questionnaire were efficient to conduct the field-survey.

During the pilot testing process, the researcher and the team realised that good co-operation with the local authority and the squatter community leaders, the survey faced no refusal from the interviewees. There was no non-response during the pilot testing and rarely the interviews were interrupted by the surrounding of the interviewees' member. In summary, the pilot testing gave many good experienced to the interviewers and this study as follows:

- to assess the completion time of the questionnaire, which was between 25 to 40 minutes according to the styles of introducing interviewers' selves to the people and other traditional greeting ways.
- to estimate the over all time of the field-work..
- to increase the motivation and the involvement skill of the interviewers.
- to test the results of the theoretical part of the training process.
- to improve the question and questionnaire design.
- to define field work organisation and procedures.

3-6 Administering the Field Research

It is understood that squatters in the target location of this study have already been interviewed by other surveys before, and so they are rather reluctant to express their opinion again and again since their early requirements for helps or donation from the interviewers have failed to be materialised. It is unclear, however, whether those previous interviewers had promised them anything, but they (squatters) showed some disappointment with this team of interviewers even though we failed to persuade them to tell us what is their disappointment.

Therefore, this survey has to be designed and conducted in a very careful way, if we want to be trusted from the interviewees. Then, all relative letters including from the Development Planning Unit, University College London, and personal letter from my supervisor Mr. Babar Mumtaz concerning about this research were presented to all related institution and related persons including chief or representative of the squatter communities, and squatters who the researchers think such presentation are necessary to them.

In addition, all the interviewers were also clearly addressed about the fact that they must explain honestly to squatter settlers that this survey will not promise them any thing a s feed back except the fact that this study will surely bring new discoveries about their lives in squatter areas to the government and other related organisation. This is because the researcher will give this thesis after finishing it to the municipality of Phnom Penh, to other NGOs if they are interested. Moreover, all interviewers must also explain to squatter settlers that this survey is purely carried out for the purpose of this study in which all of their names are not shown in this paper. The interviewers were told not to ask the respondents' name during the interviews.

Since the questionnaire and all questions are simple and easy to be answered, the team of interviewers did not make any appointment or handed out questionnaires to them beforehand as these were not necessary. Most of the interview schedules took place during lunch time or during the evening after their working time. Most of the meeting were successfully and friendly conducted which none of the interviewees was refused to be interviewed, excepted some of them had some confusion in responding our questions, but they all were eventually clarified by the team of interviewers.

3-7 Difficulties and Irregularities of and Experiences during the Fieldwork:

- Difficulties and Irregularities:

Many difficulties arose during the fieldwork. The first difficulty was approaching the interviewees at an appropriate time (convenient to them). This is because many of them work different hours to that of the government employees. The researcher and the team, however, decided that the best time to conduct the interviews was late afternoon as most of the interviewees' families members would be home compared to other times of the day. There were quite a few appointments with interviewees who still failed to show up at the agreed time.

However, the researcher and the team persisted so that the interviews could be conducted. That is to say, although most of the interviewees were successfully met during the after-noon (between 5 : 30 p.m. and 7: 00 p.m.) many other interviewees were held at different times of the day (early morning, before 7: 00 a.m.; lunch time 11: 15 a.m.; and night time 8: 30 p.m.) according to the availability of the interviewees. Another difficulty was the unexpected problem of facing the few

Vietnamese interviewees who had limited knowledge of the Cambodian language (Khmer). The interviews were thus stalled until an interpreter was found. As a result, the fieldwork was delayed for several days.

The inaccuracy of the government data on the number of squatter families was one of the main difficulties in conducting the survey. As a result, the total of 20 interviewees reserved for each studied squatter settlement was heavily used (18 in the case of Boeng Kak, 16 in Bassac River and 13 in East Preah Monivong Bridge settlement). Because of the irregularities in the secondary data the team was advised not to give up the selected interviewees as this could lead to a lack of respondents if all the reserved numbers were to run out. However, this was time consuming and the fieldwork was thus conducted over a period of almost 5 months instead of the estimated 4 months.

- Experiences during the Fieldwork:

The rather large numbers in our reserved samples were at the end advantageous and useful due to the inaccuracy of the government data as mentioned earlier. The decision to use the government data on the number of squatter families was because it was compiled on the basis of property ownership, namely buying and renting. However, the data from the international organisation included these of the government categories as well as temporary residents such as visitors to the squatter families. Since the visitors know little about or are not concerned with the squatting issue, the researcher decided that it was appropriate to use the list of squatter family numbers from the authorities as the basis for selecting the random sample in this study.

3-8 SPSS Statistical Software Package, Questionnaire Coding and Data Entry, and Data Analysis

It is well known among scholars and professionals that SPSS for Windows is considered as one of the most advanced statistical packages on the market. This programme is also relatively easier to be understood compared to others i.e.: SAS, or STAT Plus. It is also faster to input data into this programme than with the other programmes. Therefore, SPSS for Windows was chosen in this study.

In order to save time with questionnaire coding and data entry, the master coding of all variables was done on a model paper starting from the first question until the last one. These model papers were used for the all 280 questionnaires without having to repeat the process of coding for all the questionnaire papers. This indeed made data entry a lot easier and quicker, and of course reduced repetitive work. In the data analysis process, two programmes were employed in this paper: firstly, the same SPSS for Windows package and secondly Harvard Graphics version 2.0 for translating the data into graphics.

Consequently, the data was organised for processing in the SPSS computerised statistical programme, which is appropriate for handling and calculating variable frequencies and cross-tabulations. To facilitate this aspect of the study, the collected data was organised in to two files - the total sample of all 210 squatter households and all 70 slum households. The total processed data was recorded in three files with wide options for processing in the SPSS system. The data was processed in a first version on location on a laptop computer to facilitate the cross-checking of information collected. In the SPSS programme, the data variables have been processed in accordance with the issues investigated in this study and in relation to the hypothesis presented.

Attention should be paid, as presented by Moser & Kalton:1979; Kiess & Bloomquist:1985; Babbie:1990; Miller:1991; de Vaus:1996, to the suggestion that social scientists should be aware of the two considerations of reliability and validity in the construction and evaluation of measurement during data analysis. Validity refers to the success of an instrument in measuring what it sets out to measure (de Vaus:1996). This refers to "...the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration" (Babbie:1990, p.134). Validity of measures cannot be achieved unless the measure is reliable, but a reliable scale is not necessarily valid, for it could be measuring something other than what it was designed to measure (Kiess & Bloomquist:1985). Reliability refers to the extent to which repeated measurements made under constant conditions will give the same result.

It should be noted that the reliability and validity of a scale are always specific to a particular population, time and purpose and to not invariant characteristics (Moser & Kalton:1979). In any given study the researcher has to decide what degree of unreliability and invalidity he or she will regard as acceptable.

A. Validity:

The meaning of validity differs depending on whether it refers to subjective or objective questions. When people are asked about subjective states, for example, attitudes and opinions towards migration, there is no objective way of validating their answers. Only that person can freely access his or her feelings and opinions. Thus, the only way of assessing the validity of reports of subjective states is the way in which they correlate either with the other answers that a person gives, or with other facts about the person's life that one thinks should be related to what is being measured (Meyers:1979). For such measures, there is no truly independent direct measure possible (Babbie:1990). Because of this fundamental difference in the meaning of validity, therefore, this study undertakes two steps to improve the validity of the questions: (1) make the questions as reliable as possible and (2) ask multiple questions on one subject.

Following these two attempts to boost validity, their success could be measured firstly by checking face validity. Mental images that individuals associate with a particular concept often have a common thread; where this is true, the concept can be said to have face validity (Meyers:1979). Other, more systematic, approaches to validity have been discussed by de Vaus (1996). They are: (1) content validity, which refers to the degree to which a measure covers the range of meanings included within the concept; (2) criterion-related validity, which is something called predictive validity and is based on some external criterion; and, (3) construct validity, which is based on the way a measure relates to other variables within a system of theoretical relationships.

In checking content validity, not only should questions contain the common thread of the concept under study, but they should also cover the full range of possible attitudes, and cover them in a balanced way. The assessment of content validity is essentially a matter of judgement. In this study, the judgement of both facial and content validity were made by several experts in this field.

Ideally, the validity of a measure is determined by comparing it to a well-defined and theoretically-supported standard measure, in other words, criterion-related validity. Criterion-related validity is concerned not only with measuring current validity against a fixed measure, but also with how the measurement scale will perform under forecasted future criteria. The critical problem of this approach in the social sciences is that well-established measures do not exist for major variables

(Meyers:1979). Measurements of variables in this study, consequently, cannot be compared with true measures.

To ensure construct validity, it is necessary to establish the true dimension of a variable or to determine a true relation between variables. A valid measure truly reflects the theoretically defined dimension of variables, and a valid relationship truly depicts the association between two or more variables. The extent to which both types of validity (measurement and relationship) are established is only approximated in the social sciences. There are several sociological studies that show a direct relationship between socio-economic status and reasons for squatting, demographic characteristics, etc. In this study, the socio-economic status of the squatters was measured by incomes (See Chapter 1 for detail). The demographic characteristics were measured by age, gender and marital status. To establish whether these measures of socio-economic status, demographic characteristics and variables included in this study are valid, direct relationships between those variables should be obvious.

B. Reliability:

If a construct does not change over time, then the empirical data obtained from repeated measurements of that variable should also not change. A measure of a construct has reliability if consistent measurements are obtained from one time to another. Measures of a construct that are not stable when the variable itself does not change cannot be reliable; it must be remembered that reliability refers to “the accuracy, consistency or dependability of a measuring technique” (Cronbach:1951, p.297; Leary:1991, p.345). More specifically, it is defined as “the relative absence of errors between true score and observed score” (Kerlinger:1973, p.43). Broadly speaking, according to standard textbooks, there are three ways to estimate the reliability of a measure (Kiess & Bloomquist:1985; Leary:1991; Miller:1991; Oppenheim:1992; de Vaus:1996):

(1) Test-retest reliability: this is a test for the consistency of respondents’ responses over time. It is carried out by measuring responses on two occasions with a time interval in between. The test then correlates the two sets of scores. This type of test is suitable when a change in measurement score is not expected, for example, in an IQ or a personality test, rather than when measuring hunger and fatigue.

(2) Interrater reliability: also known as inter-judge or inter-observer reliability. This test measures the consistency between two or more investigators who observe and record the same subject.

(3) Inter-item reliability: this test is only suitable for measurements consisting of more than one item. When several questions or items are summed to provide a single score, this test is generally taken. Inter-item reliability refers to consistency among the items or a scale.

Because the state of subjects implied in the current research changes over time, the test-retest reliability test is inappropriate. Because an interviewer cannot rate a respondent's feelings of satisfaction, the interrater reliability test was also deemed inappropriate, but the inter-item reliability test was considered suitable for this work. With the questionnaire being composed of many questions repeatedly measuring the same construct, such as reasons for out-migration or migrants' characteristics, the results of the inter-item reliability test allowed items in a similar construct to be summed.

C- Data analysis Methods:

In contemporary world, researchers have three methodological analyses: the quantitative, the qualitative and a mixed approach (Hantrais and Mangan: 1996). In this research, although quantitative method is mainly the dominant one, qualitative method is also employed to further support the results of the quantitative methods where it can not be statistically analysed. The main reason for choosing the quantitative method as the main method in this study is because, as Hantrais & Mangan (1996:131) point out "Quantitative analysis has mainly been used by social scientist. Its strength lies in the abilities to aggregate information on large number of different units for macro-studies".

Or as Bryman (1988:1) points out "Quantitative research is typically taken to be exemplified by the social survey and by experimental observation and unstructured, in-depth interviewing". This criteria fit this research type where it undertakes the empirical macro-studies of the various squatter settlements of which mass population have to be investigated. Although, as Hantrais & Mangan (1996:131) claim that "qualitative research offers the advantages of correlating theoretical assumptions and empirical material in a tighter way than can be done

when using standardised statistical methods”, in no way, this can be used to cover the numerous and quite various composition of the target studied population.

In addition, qualitative method becomes weak and helpless when it comes to comparative studies (Hantrais & Mangan: 1996). This is because qualitative method often focus on single situations, organisations, and institutions while quantitative method can focus on multivariate issues (Strauss: 1987). Moreover, as Bryman (1988;1) adds “qualitative methods such as participant observation tended to be regarded as relatively marginal in the context of the social scientist’s armoury of data collection techniques”. In this case, it becomes quite clear that it cannot be used as the main method in this study since there are four randomly chosen settlements are investigated and compared in this research.

However, the strength of the qualitative method in description of social dimensions of urban life (Hantrais & Mangan: 1996, p.131) is employed in this study to further support the results of the statistical method that lacks this strength. As Blalock (1970:45-6) concludes “ many social scientists prefer to think of participant observation (qualitative method) as being useful at a certain stage in the research process rather than being an approach that yields a finished piece of research”. The qualitative method is presented in four boxes of this study that constructed from the informal interviews during the field work, September 1996-February 1997 in Phnom Penh, Cambodia.

E. Inter-item Reliability Tests:

In the quantitative analysis carried out in this research, two statistical test methods of data analysis techniques - Chi-square and regression model - have been used. The main reason for choosing these two statistical methods lies in the function of these methods; they are designed to examine whether two or more variables are dependent or independent from each other. In other words, the methods can tell us whether there is or is no association between the studied variables (Howitt & Cramer: 1997, George & Mallery: 1995). Chi-square test is used in this study to examine the relationship between two variables, such as between the level of income and the access to water supply in the studied settlements as the conclusion to our cross-tabulation analyses.

Chi-square - Chi-square tells us if two or more samples, each consisting of frequency data (nominal data), differ from each other. It can also be used to test whether a single sample differs significantly from a known population. The formula to calculate Chi-square is shown below and is computed by summing the square deviations (observed value- f_o minus expected value- f_e , divided by the expected value for each cell (George & Mallery:1995).

$$X^2 = \sum [(f_o - f_e)^2 / f_e]$$

In Chi-square test, the significant coefficient, p , is varied between 0 and 1. If p is close to 1 the observed value does not differ significantly. If $p < 0.05$, it is commonly accepted that the observed values differ significantly from the expected values and that the two variables are not independent of each other. In other words, there is a significant correlation between the two variables (George & Mallery:1995).

Logistic Regression analysis - In the quantitative analysis carried out in this research, a particular type of multivariate statistical technique has been used - logistic regression analysis. Logistic regression models, also known as logit models, require far fewer assumptions than discriminant analysis or multiple regression analysis (logistic regression is an extension of multiple regression). The reason for using this model is because the data analysis of this study is in the 'categorical' scales, so the chance of using statistical analyses is very limited. Basically what this study needs, is frequency tables and Chi-square. Regarding regression, one may argue that linear model would be more appropriate to explain the variables, however, the categorical scales can not be used as linear regression since that is based on correlation analysis and the logistics model is based on t-test and Chi-square. Therefore, this study only can use the logistics regression model.

According to George & Mallery (1995), logistics models have three special features. First, in logistic regression, the value that is being predicted represents a probability, and it varies between 0 and 1. If the probability is greater than 0.5, it is predicted that the event will occur. Second, the probability of an event occurring does not increase linearly with a unit change in the explanatory variables, but approaches zero at a slower and slower rate as the value of an explanatory variable gets larger and larger.

Third, all variables in the model are tested here to see if they should be removed from the model - the so-called Stepwise Selection method. At each step, the variable with the smallest significance level for the score statistic is entered in the model. Then, all variables that have been entered are analysed to verify if they meet removal criteria. If the SIGNIFICANCE OF LOG LR values for a variable are larger than POUT (the criteria for removing a variable from the equation), then that variable will be dropped. In this example, since all of the -2 log LR values are less than POUT, no variables can be removed. Because no variables can be removed and no variables can be added, the logistic regression equation is complete (George & Mallery:1995).

The variables in the questionnaire were categorical. One example from the data analysis is illustrated as follows: the answers to the questions relating relation to the most important reason for leaving I-Lan county were grouped into 6 main categories (job and job-related, education and education-related, to seek a better income, family-related, seeking better status and other reasons) and each category was regarded as a dependent variable that has been coded yes and no (0 and 1) in the model. Logit regression analysis of interval variables produces a single equation for the probability of an event occurring, which can be written as:

$$\text{Pro (event)} = 1 / (1 + e^z)$$

Where

$$Z = B_0 + B_1X_1 + B_2X_2 + \dots + B_p X_p$$

In this research, categorical variables were used, therefore the model produced a set of equations that correspond to all the categories of each question. In addition, several methods based on this regression model, such as goodness of fit, forward stepwise selection, the likelihood-ratio test, backward elimination and the diagnostic method, were used to enhance the reliability.

Testing Hypotheses about the Coefficients - For large sample sizes, the test that a coefficient is 0 can be based on the **Wald statistic**, which has a chi-square distribution. When a variable has a single degree of freedom, the Wald statistic is just the square of the ration of the coefficient to its

standard error. For categorical variables, the Wald statistic has degrees of freedom equal to one less than the number of categories (George & Mallery:1995).

Unfortunately, the Wald statistic has a very undesirable property (Norusis:1994). When the absolute value of the regression coefficient becomes large, the estimated standard error is too large. This produces a Wald statistic that is too small, leading researchers to fail to reject the null hypothesis that the coefficient is 0, when in fact they should. Therefore, whenever researchers have a large coefficient, they should not rely on the Wald statistic for hypothesis testing. Instead, they should build a model with and without that variable and base their hypothesis test on the change in the log likelihood (Norusis:1994; Howitt & Cramer:1997; George & Mallery:1995; Kinnear & Gray:1997).

Partial Correlation - As in the case of multiple regression, the contribution of individual variables in logistic regression is difficult to determine. The contribution of each variable depends on the other variables in the model. This is a problem, particularly when independent variables are highly correlated. A statistic that is used to look at the partial correlation between the dependent variable and each of the independent variables is the *R* statistic. *R* can range in value from -1 to +1. A positive value indicates that, as the variable increases in value, so does the likelihood of the event occurring. If *R* is negative, the opposite is true. Small values for *R* indicate that the variable has a small partial contribution to the model (George & Mallery:1995). The equation for the *R* statistic is

$$R = \pm \sqrt{[(\text{Wald Statistic} - 2K) / -2LL(o)]}$$

where *K* is the degrees of freedom for the variable. The denominator is -2 times the log likelihood of a base model that contains only the intercept, or a model with no variables if there is no intercept. The sign of the corresponding coefficient is attached to *R*. The value of *2K* in the Equation is an adjustment for the number of parameters estimated. If the Wald statistic is less than *2K*, *R* is set to 0 (Norusis:1994).

Assessing the Goodness of Fit of the Model - In addition, steps are taken to ensure that the model fits the data collected in this research. The goodness of fit of a logistic regression

model may be assessed by various methods. In this research the method used to assess how well the model classifies the observed data was the Classification Table, shown in Table A-3.

The other way of assessing the goodness of fit of the model is to examine how 'likely' the sample results actually are, considering the parameter estimates. The probability of the observed result, given the parameter estimates, is called the likelihood. Usually, the measure employed to assess how well the estimated model fits the data is -2 the log of the likelihood (-2LL), since the likelihood is less than 1. A model is considered good when the likelihood of the observed results is high. The goodness of fit of the model used in this research with all the independent variables has also been assessed (George & Mallery:1995).

The model chi-square statistic in logistic regression models is comparable to the overall F test for regression. In this model, the model chi-square is the difference between -2LL for the model with only a constant, and the -2LL for the complete model. Therefore, it tests the null hypothesis that all the coefficients in the model, apart from the constant, are zero.

Forward Stepwise Selection - The improvement statistic represents the change in -2LL between successive steps of building the model. It tests the hypothesis that the coefficient for the variables added at the last step are. In the forward stepwise selection method used in this research the improvement represents the changes that the introduction of each variable brought in the model. This was used in the selection of predictor variables. The improvement chi-square test is comparable to the F-change test in multiple regression. The improvement statistics are also present in the finding in chapters 4 and 5.

Forward stepwise variable selection in logistic regression starts out with a model that contains only the constant, unless the option to omit the constant term from the model is selected. At each step, the variable with the smallest significance level for the score statistic, provided it is less than the chosen cut-off value (by default 0.05), is entered into the model. All variables in the forward stepwise block that have been entered are then examined to see if they meet removal criteria. If the Wald statistic is used for deleting variables, the Wald statistics for all variables in the model are examined and the variable with the largest significance level for the Wald statistic, provided it exceeds the chosen cut-off value (by default 0.1), is removed from the model. If no variables meet removal criteria, the next eligible variable is entered into the model (Norusis:1994).

The Likelihood-Ratio Test - A better criterion than the Wald statistic for determining variables to be removed from the model is the likelihood-ratio (LR) test. This involves estimating the model with each variable eliminated in turn and looking at the change in the log likelihood when each variable is deleted. The likelihood-ratio test for the null hypothesis that the coefficients of the terms removed are 0 is obtained by dividing the likelihood for the reduced model by the likelihood for the full model.

Backward Elimination - Forward selection starts without any variables in the model. Backward elimination starts with all of the variables in the model. Then, at each step, variables are evaluated for entry and removal. The score statistic is always used for determining whether variables should be added to the model. Just as in forward selection, the Wald statistic, the likelihood-ratio statistic, or the conditional statistic can be used to select variables for removal (Norusis:1994).

However, after testing all the studied variables in this research, most results are statistically insignificant, where $p > 0.05$. In other words, the results of the tests indicate, for example in regression table 3-3, that the independent variables of level of education, migration status and level of income have no influence on the dependent variable of reason for squatting or living in squatter settlements. Only age of the population seems to have an influence on the reasons for squatting of the population. According to Howitt and Cramer (1997) and George & Mallery (1995) there are two possible reasons for the unexpected results.

Table 3-3: The Regression Model of the Relationship between the Independent Variables and the Dependent Variable of the Reasons for Squatting or Living in the Bassac River Squatter Settlement

Independent Variable:	-2 Log Likelihood	Goodness of Fit	X ² & Improvement	P- value: significant	R-coefficient
Age	79.80	72.00	7.12	0.04	-0.10
Status of migration	80.00	71.00	21.5	0.12	0.06
Level of education	80.60	70.00	9.45	0.40	-0.04
Income	80.50	70.00	6.91	0.08	0.20

Source: Results of statistical tests

Note: There are similar results for the remaining two studied squatter settlements, where there are only a few significant tests.

First, there could be an error in the data coding. Second, there could be a problem with the size of the studied sample, i.e. too small. However, the SPSS programme does not explain such results, which leaves the translation of the results by the researchers. In the case of this study, after finishing the test results, the author rechecked the data coding as recommended

above, but found no error or irregularity. Yet, a decent sized sample had been employed in this study compared with examples used in both Howitt & Cramer (1997) and George & Mallery (1995 publications (47 & 50 sample sizes).

Many discussions were held with friends and professional who are experienced statisticians. We found that the reason was the nature of this study's data categorisation, for example that the variations in income level are too great between the low and high income categories, and then become too gross when categorised into low-, middle- and high-income groups. Finally, there was an agreement to abandon the regression test by using the Chi-square test for all the analyses. Although this will produce more tables and longer written analysis, it is the best way due to our data categorisation.

In all the tables, the results of the Chi-square test are presented to check significance at the level of general categories i.e., between employment and income. However, the nature of the data does not allow tests of significance to be performed further i.e., which type of employment is linked to which type of income. Hence, only explanations are provided without having a case for level of significance or causal relationships.

Chapter Four: Socio-economic Characteristics of the Studied Settlements & Demographic and Socio-economic Characteristics of the Studied Population, Migration Patterns, and the Process of and Reasons for Migration to Phnom Penh

Introduction:

This chapter aims to answer the research question of who these squatters are and to provide an understanding of the studied squatter and slum settlements. What is life like in the squatter and slum settlements? Where did the squatters come from? How did they come to the squatter settlements? How long have they been in the city before squatting or moving into the squatter settlements? Do most squatters have a lower level of education compared with the rest of the city's population, and does it therefore follow that the majority of them are employed in the informal sector of the economy? Most of the data analyses are conducted by applying statistical analyses - including Chi-square and logistical regression tests - according to the nature of the data¹.

This chapter has 7 sections. Section 4-1 discusses the services and infrastructure of the three studied squatter and slum settlements. Section 4-2 examines migration patterns, including the type and status of the studied population. Section 4-3 provides the demographic characteristics of the studied squatter and slum population by type and status of migration. Section 4-4 examines the socio-economic characteristics of the studied population, mainly through education, type of job and income by type and status of migration. Section 4-5 studies the main reasons for migration to Phnom Penh of the studied population. Section 4-6 analyses the process of migration to Phnom Penh by looking at how the studied population found their way to the city and includes all the answers to the above research questions. Lastly, section 4-7 is a summary of the discussions and findings of this chapter with reference to the literature review earlier in this paper.

4.1 Services and Infrastructure in the Studied Squatter and Slum Settlements

This section discusses the socio-economic characteristics of the studied squatter and slum settlements. There are two purposes for this: first, to see how the situation of and conditions in squatter settlements in Phnom Penh compare with squatter settlements of other developing

¹ As mentioned in Chapter 3, because some data are not suitable for regression a Chi-square test was required instead. For example, regression could be employed in data that contain comparative independent variables, such as income and education.

countries, as discussed in the literature review in Chapter 2. Secondly, to compare the studied squatter and slum settlements in an attempt to show that both types of settlement have similar conditions - poor and inadequate services and infrastructure.

4-1.1 Services and Infrastructure in the Studied Squatter Settlements:

The services and infrastructure available in each of the studied squatter settlements differ considerably. One of the biggest problems in the settlements is the lack of toilets, both for individual households and the public, which results in the pollution of water sources such as rivers and underground water (wells). This is because open spaces in the surrounding areas and the river are used as disposal sites for squatters' human waste. The situation worsens during the rainy season, when many parts of the settlement are flooded and human waste is washed to the surface. According to Table 4-1.1, only 24 per cent of the total squatter households in the city, or 7,364 households (the total number of squatter households was 171,730 in early 1997 - 'UNDP/ODA'), have their own toilets compared with 78 per cent of households in the city as a whole. Also, 62 per cent of squatter households have no toilets or access to a facility that would normally be regarded as a toilet².

Table 4.1-1: Number and Distribution of Toilets in Squatter Settlements in Phnom Penh City

Units	Number	Percentage
Total squatter population in 379 locations	171.730 people (30.150 families)	100
Number of households with own toilet	7.364	24
Number of households without toilet who use no toilet	18.827	62
Number of households without toilet who share with others	4.221	14
Number of Phnom Penh's households with own toilet		78

Sources: Compiled from:- UNDP/ODA and Municipality of Phnom Penh Report, January 1997
 - Report on the Socio-economic Survey of Cambodia 1993-1994, and October 1996; National Institute of Statistic, The Ministry of Planning.

In much the same way the physical characteristics of squatter houses vary from one area to another and depend on many factors, such as the composition of the population and geographical location. Services and infrastructure are also poor and inadequate, and are not provided by the authorities since the settlements are considered illegal by the government. Therefore, even if the government

² The number is arguable when one looks at the obvious picture at the sites. This figure should be lower and in some squatter areas, such as Boeng Kak, the majority of squatter households have their own toilets and these are also in relatively good condition. The author has personally visited and used these toilets.

has the financial ability, it never intended to provide any services or infrastructure to settlements of this type. It is understandable that the government sees such service provision as the first step in recognising and legalising squatter settlements, which completely contrasts with its policies of squatter eviction or resettlement. The squatters solely provide all services and infrastructure in squatter settlements, often with the help of IOs and NGOs.

In the studied *Bassac River* squatter settlement, the many sub-areas have different levels of public services, depending on the geographical location. Those sub-areas located inland and close to the developed areas of the city have better access to public services than those on the bank of the Bassac river and those on the recently reclaimed land adjacent to the river. It is rather the luck of the draw for squatters who squat or illegally buy property in squatter areas when they settle close to developed parts of the city where they have better access to services than those living further away. However, the indirect squatters (buyers and tenants) have to pay between two to three times more to settle in areas close to public services and facilities than if they settle further away and in areas built over the water, which face flooding during the monsoon season (Fieldwork: 1996-97).

In the Bassac River settlement there are no schools, clinics and other services, except for a small market (or rather, a daily trading place, since it is very small and normally only used by the local squatters) where cooked food is mostly traded. Most of those children in the squatter area who do go to school attend schools in the surrounding non-squatter areas of the city that are within walking distance. It seems that schools are not too far away and that parents do not have to walk the children to and from school. The problem, however, is more likely to be that children in squatter families work to help feed the family rather than go to school.

As mentioned earlier, this squatter area has no public services, but squatter families seem to have no difficulty obtaining access to nearby public services simply because of the area's proximity to the city centre. For example, the Kap Kor (cow butchering) market is within walking distance (10 minutes or less) from the squatter areas, while hospitals are also situated in many parts of the Chamkamorn district where this squatter area is located. Likewise, squatters can go to many pagodas that are within walking distance. In some cases, such as the Wat Proyou Vong Pagoda squatter community, squatters even live in the temples and other religious stupas. Therefore, they do not need to go anywhere to celebrate religious events, but can do it at home.

While squatter families in the area have easy access to the city centre and other parts of the city, the problem is access to areas within the squatter settlement. Some houses in the area are very difficult to reach even on foot, while others can be reached only by passing through other properties. During flooding in the rainy season, the inhabitants, particularly children, often become the victims of epidemic diseases such as diarrhoea, typhoid and cholera as a result of inadequate or a lack of sewage systems and poor hygiene. The area is also subjected to fires. Twice in 1997 most of the sub-area were razed to the ground. The fire brigade was unable to intervene due to lack of access to the areas.

The studied *East Preah Monivong Bridge (E.P.M.B.)* and Bassac River squatter settlements discussed above have similar characteristics in terms of services, infrastructure and geographical location, although the E.P.M.B. area was squatted at a later date (as discussed in section 4-2). Within the main area of the E.P.M.B. settlement, there are geographically two sub-areas with different levels of access to the city's public services. One area is located on the riverbank of the Tonle Bassac Toch (small Bassac river) and the other along the Tonle Bassac Thom (big Bassac river) and surrounding inland areas. The first sub-area is also close to the Chbar Ampile market and has better access to services than the second, which is further from the market and city centre.

While religious facilities like pagodas are nearby in adjacent areas, there are no public schools or hospitals in the area. Like in the Bassac squatter area, the road system is very poor. Flooding is common and during the rainy season some parts can only be reached by boat. There is no access for fire engines to the area and, even if there was, it doubtful whether fire fighters would be able to stop a blaze from destroying most of the closely-built houses as the area is very crowded, particularly along the Tonle Bassac Toch (small Bassac river).

With a relative small population of 450 families early in 1997, the studied *Boeng Kak* squatter settlement is one of the most developed squatter areas in Phnom Penh, where the physical characteristics - buildings, services and infrastructure - are generally tolerable and better than in the above two areas. It is also located within the city centre and the residents enjoy as many public services as the inhabitants of legal settlements do. Although there is no market in the area, many large and famous markets of the city are within walking distance. Likewise, religious services are within a conveniently range and Muslim residents have a mosque in the area. Children can attend

the many schools in the city if their parents can afford to send them there. Even though there is no school in the area it is perhaps not necessary and would not be economical to build one due to the relatively small population.

There is no public clinic in the settlement, but the famous Calemte Hospital is located next to the area along the main Preah Monivong Boulevard. Apart from the public hospital, there are a few private surgeries within the area for those who can afford to pay for such services. The reason for there being no hospital in the area is because the government considers it an illegal area and will therefore not provide such services. However, this is not a problem as there is a hospital nearby, which would also make it uneconomical to build another in the same area.

This is a general picture of life in the three studied squatter settlements. It is now time to examine the basic needs of the population, such as their water supply, electricity, sewage systems and waste collection, in relation to their income.

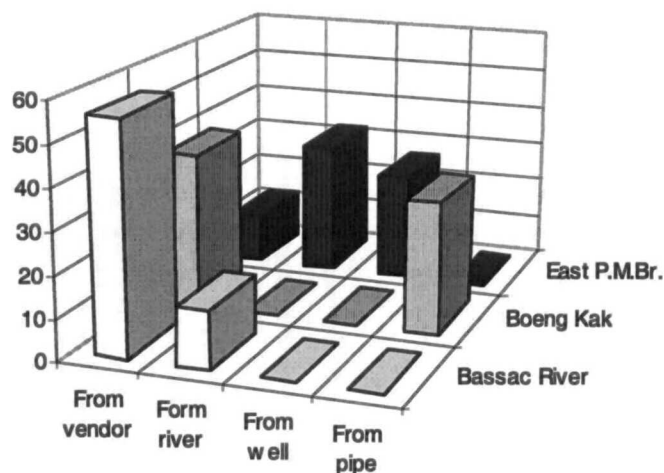
- Water Supply:

There is no general picture that could represent all the squatter settlements in Phnom Penh and, even within each studied settlement, the sub-areas also differ from one another, mainly due to their geographical location. As a result the source of water also differs from one settlement to another. Figure 4-1.1 shows that the majority of the studied squatter population obtains water by buying from vendors, many of whom in turn buy from those who own water tanks or pump water from the river with generators. The water from the river is often untreated or has only undergone very basic treatment and could therefore be contaminated, especially when it is pumped down-stream of the squatter settlements. This is because the squatters often dispose of human waste in the rivers.

Residents in this squatter area received water through three channels at the time of this survey: public or private wells, rivers and vendors, depending on the house's location. Those living on boats or on the riverbank draw water directly from the river, while those who had settled inland either buy water from vendors or carry it from public or private wells, which is normally free of charge.

At the same time, some of the residents who are located inland but can get water directly from the rivers do so. In the same way, some of those who live next to the river buy from vendors as they can either afford to do so or lack the manpower required to collect water, which is a task often performed by young, unmarried female Vietnamese immigrants. According to the interviews, the residents do not have the option of receiving public water because connecting to the system is not viable. This is due to several reasons, including the distance from the pipe system, lack of legal right to be connected to the system, the crowded housing conditions in the area etc. Like in the Bassac River settlement's case, none of the households in this settlement have access to the public water supply, while around 40 per cent³ of the households in the city as a whole have access to public water.

Figure 4-1.1: Sources of Water of the Studied Squatter Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

Figure 4-1.1 also reveals that there is no public water stand pipe or well are in the Bassac River squatter settlement. A public water stand pipe also is not available in the East Preah Monivong Bridge settlement, while, as is to be expected, none of the Boeng Kak settlement's population obtains water from rivers, lakes or wells. In relation to income, Table 4-1.2 reveals that, in general, the majority of the low-, middle- and high-income populations of all the studied squatter settlements buy water from vendors. However, the Chi-square test results reveal that the relationship between the variables of level of income and water source exists in only one of the three squatter settlements.

³Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

In other words, there is no significant association between the level of income and the source of water supply in the Bassac River and Boeng Kak squatter settlements ($p = 0.208$ and $0.207 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.039 < 0.05$). According to Table 4-1.2, the majority of low- and middle-income squatter populations of this settlement get water from the river, while the majority of high-income group get water from the well. Although this is the result of the statistical test, in reality, these households do so because of their location rather than their level of income. This is because, for example, any of the squatters who live far from the river or a well do not have much of a choice but to buy water from vendors, regardless of their level of income.

Table 4.1-2: The Relationship between Income Distribution and Source of Water in the Studied Squatter Settlements

Level of income	Bassac River				East Preah Monivong Bridge				Boeng Kak			
	Buy from vendors	Free from rivers	From well	From public pipe	Buy from vendors	Free from rivers	From well	From public pipe	Buy from vendors	Free from rivers	From well	From public pipe
Low income	45 64.3	13 18.6	0 0	0 0	3 4.3	14 20.0	6 8.6	0 0	22 31.4	0 0	0 0	19 27.1
Middle income	6 8.6	0 0	0 0	0 0	0 0	10 14.3	5 7.1	0 0	11 15.7	0 0	0 0	10 14.3
High income	5 7.1	1 1.4	0 0	0 0	9 12.9	8 11.4	15 21.4	0 0	5 7.1	0 0	0 0	3 4.3
Total	56 80.0	14 20.0	0 0	0 0	12 17.1	32 45.7	26 37.1	0 0	38 54.3	0 0	0 0	32 45.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 5.88, p = 0.208 > 0.05$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 21.80, p = 0.039 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 8.43, p = 0.207 > 0.05$ - N.S.

Of course, all the low-income earners would greatly benefit if they could obtain water from a river, public stand pipe or wells at no charge, but they are forced to buy water from vendors since they live in places without access to such sources. In addition, in all the studied squatter settlements the number of households who have access to the public water supply is lower compared with the city's population as a whole, where around 40 per cent⁴ of the households have access to piped water.

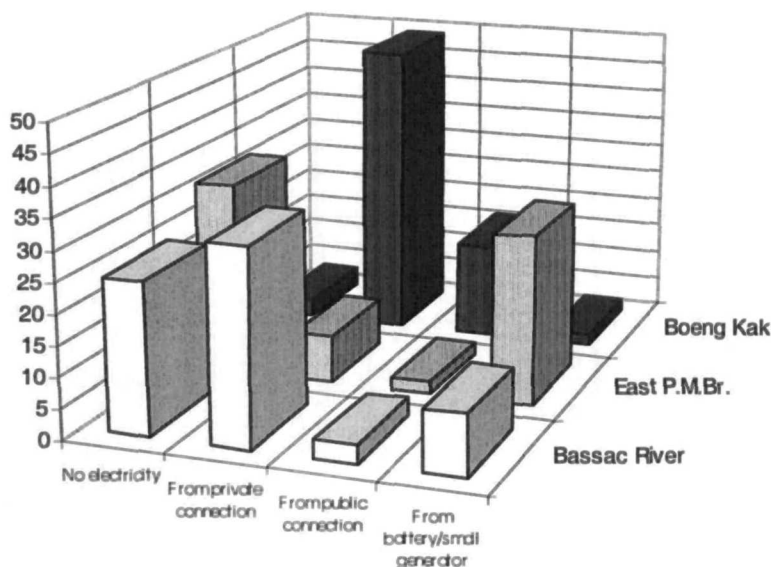
⁴Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

- Electricity Supply:

From time to time, as the capacity of the city's electricity is improved, the squatter areas also benefit directly or indirectly. However, unlike in the case of water supply, electricity supply is dependent on the household's ability to afford it. It is also considered a luxury and not a basic requirement of daily life. Squatters without electricity resort to more affordable alternatives, such as Kerosene lamps, batteries or small generators (Fieldwork: 1996-1997). Since the area is located in the suburbs relatively far from government institutions, there is a very limited supply of public electricity.

This is, however, no different from the legal settlements surrounding this area, where public supply is also not the main source of energy. In comparison with the total households in the city, fewer households in this squatter settlement have access to electricity (including public and private supplies, personal generators and batteries). Only 54.3 per cent of households in this settlement have access to electricity, while the figure is around 80 per cent⁵ in the city as a whole (comprising around 65 per cent who receive electricity from the public supply, while the rest have other sources).

Figure 4-1.2: Sources of Electricity of the Studied Squatter Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

⁵Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

Figure 4-1.2 above shows that, in general, the majority of the studied squatter populations consume electricity from private connections. However, this is not the case in East Preah Monivong Bridge, where the majority of the population has no electricity at all and the households that do have their own source (mainly batteries). The figure also shows that the Boeng Kak squatter settlement has the highest number of households who buy electricity from private suppliers, followed by those of the Bassac River settlement. It is clear that the public electricity supply is available only to the minority of the studied squatter population, although the number is found to be highest in Boeng Kak.

This is because, as mentioned above, the authorities do not provide services and facilities in the squatter settlements since they believe it would imply giving recognition to the squatter settlements, which in turn would encourage wide-spread squatting. Unlike the two squatter areas above, where water can be obtained directly from rivers or a lake, this is not an alternative in this area despite it being located next to a lake. The lake has for years been a disposal site for wastewater from the hospital and the water is too polluted for drinking, cooking and even washing. Hence, the only sources of water are the vendors or public water pipes close to the area. In this case, where the surrounding areas are developed and both the area and size of the population are relatively small, the public water supply is indeed better than in the above two areas. The percentage of households in this settlement with access to public water is higher than in the city as a whole. Only around 40 per cent⁶ of the city's households have access to public water supply compared with 45.7 per cent in this settlement.

In relation to income, Table 4-1.3 reveals that the majority of the low- and middle-income populations of all the studied squatter settlements obtain electricity by buying from private suppliers. However, the majority of the high-income population consumes electricity from their own generators and batteries. However, the Chi-square test results reveal that there is only one settlement among the three where the relationship between the variables of level of income and electricity supply exists.

Therefore, there is no significant association between level of income and electricity supply in the cases of the East Preah Monivong Bridge and Boeng Kak squatter settlements ($p = 0.137$ and

⁶Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

0.773 > 0.05). However, the test results show there is a significant association between the two variables in the case of the Bassac River settlement ($p = 0.028 < 0.05$). According to Table 4-1.3, almost half of the low-income squatter population of this settlement have no electricity while the majority of the middle- and high-income groups obtain electricity by buying from private suppliers. Therefore, in the case of this settlement, income level of the population seems to have a relationship with their capacity to obtain electricity. In other words, the richer the population, the better is its chance of having electricity.

Table 4-1.3: The Relationship between Income Distribution and Electricity Supply in the Studied Squatter Settlement

Level of income	Bassac River				East Preah Monivong Bridge				Boeng Kak			
	No electricity	Private source	Public source	Own generator/battery	No electricity	Private source	Public source	Own generator/battery	No electricity	Private source	Public source	Own generator/battery
Low income	23 32.9	22 31.4	3 4.3	10 14.3	12 17.1	3 4.3	2 2.9	6 8.6	3 4.3	27 38.6	10 14.3	1 1.4
Middle income	2 2.9	4 5.7	0 0	0 0	7 10.0	4 5.7	0 0	4 5.7	0 0	14 20.0	6 8.6	1 1.4
High income	0 0	6 8.6	0 0	0 0	8 11.4	1 1.4	0 0	18 25.7	0 0	8 11.4	0 0	0 0
Total	25 35.7	32 45.7	3 4.3	10 14.3	32 45.7	8 11.4	2 2.9	28 40.0	3 4.3	49 70.0	16 22.9	2 2.9

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 22.90, p = 0.028 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 24.54, p = 0.137 > 0.05$ - N.S.

Boeng Kak settlement: $\chi^2 = 13.29, p = 0.773 > 0.05$ - N.S.

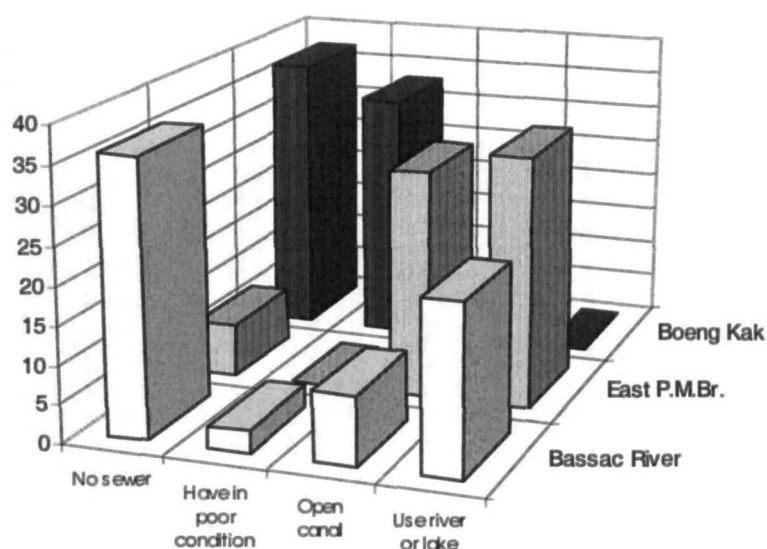
In comparison with the city as a whole, the percentage of Bassac River and East Preah Monivong Bridge households with access to electricity (including public sources as well as private generators and batteries) is lower. However, in the Boeng Kak settlement, there are more households with electricity than in the city as a whole, where around 80 per cent⁷ of households had electricity in 1997 (comprising around 65 per cent with access to the public supply and the rest relying on other sources). Electricity in the area is mainly available through private channels, such as small generators, or, more commonly, batteries and to a lesser extent through illegal connections to public power lines. It is also noted that the number of illegal connections to public power lines in the area is higher than in the above two areas, since there are numerous public power lines in the developed areas surrounding the settlement. Households that produce their own electricity represent the lowest number when compared with the rest of the studied settlements.

⁷Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

- Sewage System:

Other problems in the squatter settlements are the sewage systems and waste disposal. According to Figure 4-1.3, in general, the majority of the studied squatter population has no sewage system. Two types of sewage systems are found in this area: open canals that flow to the river or lake, and the river or lake itself. The first type is found inland where settlements are located further from the river or lake, while the second type is seen in settlements built over the river or lake. In comparison with the households in the city as a whole, the percentage of households in this settlement with access to sewage systems is higher. As many as 90 per cent of the settlement's households have access to a sewage system compared with around 65 per cent⁸ in the city as a whole. However, the condition of the sewage system in this settlement is worse than that of the city.

Figure 4-1.3: Sewer Utilities of the Studied Squatter Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

However, as mentioned earlier and as is to be expected, the percentage of the population with access to sewage systems is the highest in the Boeng Kak settlement compared with the other two settlements. However, the sewage system of this area is in a very poor condition, mainly due to the fact that most of the system was built by residents without the help of a proper plan and, secondly, because the crowded settlement left little space for effective drainage (See Photo-6). The figure

⁸Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

also shows that the Boeng Kak squatter settlement has the highest number of the population without any access to a sewage system, followed by those of the Bassac River settlement. Since both the Bassac River and East Preah Monivong Bridge settlements are located close to the rivers, many of the households in these settlements dispose of human waste in the rivers. As in the case of other services and facilities, the authorities do not provide any help with sewage systems to the squatter areas.

With regard to income, Table 4-1.4 reveals that, in general, the majority of the low- and middle-income populations of the studied squatter settlements have no sewage systems. In contrast, only the minority of the high-income group has no sewage system. However, the Chi-square test results reveal that, like in the case of electricity supply, there is only one settlement among the three where the relationship between the variables of level of income and access to sewage system exists.



Photo-6: A sewer system being laid in a part of the Boeng Kak settlement at the time of the interview.

Therefore, there is no significant association between the level of income and access to sewage system in the cases of East Preah Monivong Bridge and Boeng Kak squatter settlements ($p = 0.061$ and $0.072 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the Bassac River settlement ($p = 0.009 < 0.05$). In other words, according

variables in the case of the Bassac River settlement ($p = 0.009 < 0.05$). According to Table 4-1.4, the majority of the low- and middle-income squatter populations of the Bassac River settlement have no sewage system compared with the high-income group. Therefore, in the case of this settlement, income level of the population seems to have a relationship with the likelihood of being connected to the sewage system.

Table 4-1.4: The Relationship between Income Distribution and Sewer Utility in the Studied Squatter Settlements

Level of income	Bassac River				East Preah Monivong Bridge				Boeng Kak			
	No sewage	System in poor condition	Open canal	River or lake	No sewage	System in poor condition	Open canal	River or lake	No sewage	System in poor condition	Open canal	River or lake
Low income	32 45.7	0 0	6 8.6	20 28.6	2 2.9	0 0	12 17.1	9 12.9	20 28.6	21 30.0	0 0	0 0
Middle income	4 5.7	1 1.4	1 1.4	0 0	3 4.3	0 0	6 8.6	6 8.6	15 21.4	6 8.6	0 0	0 0
High income	0 0	2 2.9	2 2.9	2 2.9	2 2.9	0 0	12 17.1	18 25.7	2 2.9	6 8.6	0 0	0 0
Total	36 51.4	3 4.3	9 12.9	22 31.4	7 10.0	0 0	30 42.9	33 47.1	37 52.9	33 47.1	0 0	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 26.41, p = 0.009 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 20.83, p = 0.06 > 0.05$ - N.S.

Boeng Kak settlement: $\chi^2 = 11.57, p = 0.072 > 0.05$ - N.S.

Therefore, this service has no relationship with the level of income of the residents as, according to the interview, the crowded housing condition in the area does not allow for such a service even if some squatter households could afford to pay for it. The problem is that in some areas, many houses would have to be demolished to allow for the installation of a sewage system. In comparison with the households in the city as a whole, the percentage of households with access to sewage in all the studied settlements is lower, as the figure in the city as a whole is 65 per cent⁹. It is noted that at the time of the survey, the sewage system was being extended to many parts of this area by members of the community (See Photo-6). According to the residents, the cost of installation had to be met by the households, who also provided the labour to save costs.

Similarly, the remaining 52.9 per cent of households without sewage systems¹⁰ is dominated by low-income households. In comparison with the households in the city as a whole, the percentage

⁹Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

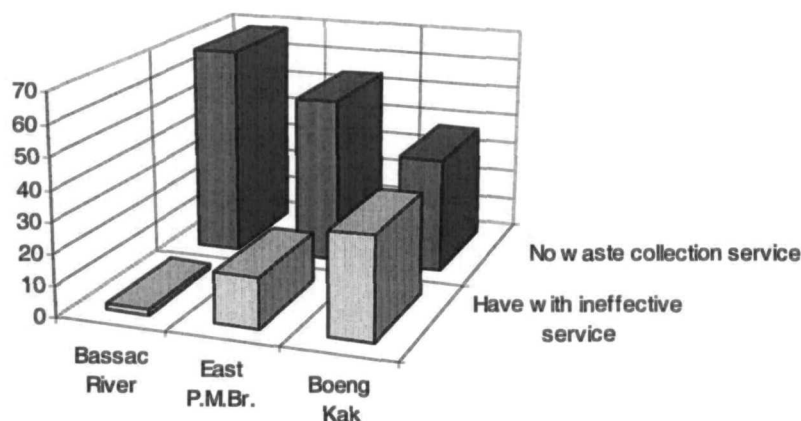
¹⁰ Among the households that do not have sewers, as mentioned above, many actually have open canals. However, these are very shallow and are rather unhygienic. Technically, they cannot be considered as sewage canals as they are not functioning effectively. Those called sewage systems with poor and ineffective connections refer to the situation where residents lay concrete pipes underground without proper plans, and these do not function effectively.

of households in this squatter settlement with access to sewage service is lower. Only 47.1 per cent of households in this settlement have access to the service compared with around 65 per cent¹¹ in the city as a whole. Moreover, the majority of households have their own toilets and only the minority share toilets with households. Those who live next to the Boeng Kak lake build their toilets over the water, which is detrimental to the local environment. However, people do seem concerned over this, since the lake has been a wastewater disposal site for decades, also for the Calemetre public hospital. However, no one seems to be seeking for a solution to the situation because of the uncertainty of land tenure and the financial difficulties of the community.

-Waste Collection:

The situation is even worse in the case of waste collection and disposal, as Figure 4-1.4 shows that, in general, the majority of the studied squatter population has no access to this service at all. The Figure also shows that the population of the Boeng Kak squatter settlement has the highest percentage of the population with access to the service. As with other services, the squatter population receives no help from the authorities. In relation to income, Table 4-1.5 reveals that, in general, the majority of all levels of income of the populations of all the studied squatter settlements have no waste collection and disposal services. The Chi-square test results reveal that there is only one settlement among the three where the relationship between the variable of level of income and the waste collection and disposal exists.

¹¹Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

Figure 4-1.4: Waste Collection and Disposal Service of the Studied Squatter Population

Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

Therefore, there is no significant association between the level of income and the waste collection and disposal service in the cases of the East Preah Monivong Bridge and Boeng Kak squatter settlements ($p = 0.109$ and $0.081 > 0.05$). However, the test results shows there is a significant association between the two variables in the case of the Bassac River settlement ($p = 0.001 < 0.05$). In the case of the Bassac River squatter settlement, as shown in Table 4-1.5, the majority of all level of income households have no waste collection and disposal service and only some of the high income groups have access to the service.

Table 4-1.5: The Relationship between Income Distribution and Waste Collection and Disposal in the Studied Squatter Settlements

Level of income	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	No waste collection service	Have ineffective service	No waste collection service	Have ineffective service	No waste collection service	Have ineffective service
Low income	58 82.9	0 0	19 27.1	4 5.7	24 34.3	17 24.3
Middle income	6 8.6	0 0	13 18.6	2 2.9	12 17.1	9 12.9
High income	4 5.7	2 2.9	22 31.4	10 14.3	1 1.4	7 10.0
Total	68 97.1	2 2.9	54 77.1	16 22.9	37 52.9	33 47.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 33.97, p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 10.37, p = 0.109 > 0.05$ - N.S.

Boeng Kak settlement: $\chi^2 = 11.22, p = 0.081 > 0.05$ - N.S.

This is because mainly, as with the sewage system, the lack of a proper road infrastructure and the crowded housing condition make the inner areas of the squatter settlement inaccessible to private waste collectors' carts, not to mention trucks. Even where the roads are wide enough, they are

often twisted and are dead-ends. This could explain why, in the case of the Bassac River settlement as seen in Table 4-1.5, only two high-income squatter households have waste collection and disposal services even though they are inconveniently far from the waste collection points. Thus, the poor road system within the squatter settlements is the most important factor influencing squatters' access to the service and not the level of income. In comparison with the population of the city as a whole with access to waste collection and disposal - around 95 per cent¹² - the percentage of households with access to waste collection and disposal in all the studied squatter settlements is lower.

It is unfortunately true that all the boat-squatters and those who live next to the rivers use it as toilets and sewers, while those living inland also just dump waste around their homes. This is because the service is only available in the areas close to the main public roads. Thus, the level of income of squatters has no impact on the capacity to obtain the service in this settlement. In comparison with the households in the city as a whole, the percentage of households in this settlement with access to a waste collection and disposal service is many times lower. Only 22.9 per cent of the settlement's households have access to the service compared with around 95 per cent¹³ in the city as a whole. However, the percentage is still higher than that of the Bassac River settlement above (which is only 2.9 per cent).

In comparison with the households of the city as a whole, the percentage of this squatter settlement's households with access to waste collection and disposal is lower. Only 47.1 per cent of households in this settlement have access to the service compared with around 95 per cent¹⁴ in the city as a whole. As with the other services, waste collection and disposal is the responsibility of each individual household since the government makes no provision for this service. However, the majority of households pay for private waste collection, while the rest throw their waste into the lake, or on vacant plots. However, this is improving along with the residents' increased understanding of their environment as a result of work by IOs and NGOs in this and other squatter areas in the city.

¹²Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

¹³Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

¹⁴Source: Obtained from H.E.Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

4-1.2 Physical Characteristics of Dwellings, Services and Infrastructure of the Studied Slum Settlement of Boeng Salang

Although the main purpose of this study is to examine squatter settlements, the Boeng Salang housing community for the poor was also selected for the study as it will show that the living conditions in the slum settlement is no better than in the squatter settlements. An examination of this area will answer the question of why these people, who are also poor and live in poor conditions, do not squat or live in squatter settlements.

Although many parts of the area can be regarded as squatter settlements - particularly those that were built along open sewage canals - this study only selected non-squatter households for the interviews; in other words, households who own the property they live on or who share with their parents, relatives or friends, who are legal residents. In addition, the respondent selected from this area were those households with the lowest, or lower than average, living standards in the city in terms of overcrowding and general poor housing conditions.

- Physical Characteristics of Dwellings in Boeng Salang Slum:

There are many types and conditions of housing in this area, which is one of the poorest in the city (according to the Municipality of Phnom Penh: 1996). Most of the houses of the interviewed households were, however, dilapidated and in a poor condition. Most of the houses had roofs and walls of thatch or leaves, with bamboo or wood reinforcements. This is similar to the makeshift huts in the squatter areas of the city (see also Photo-6). As with the squatter houses, the size of the slum houses varies depending on the wealth of the inhabitants. Most of the houses are around 25 to 30 sq. m, which is bigger than the majority of squatter houses.

Traditionally, self-help housing has been the most popular method of housing provision employed by the people in this area. The residents, with or without help from relatives or friends, had built most of the houses (Fieldwork: 1996-1997). It is true that the plots of households in this area are larger than in the studied squatter areas and these families have been able to raise livestock, most commonly poultry, on their properties to feed the family, but not enough for commercial purposes. Table 4-1.6 shows that the number of livestock in the area is higher than in the three studied squatter areas.

Table 4-1.6: Numbers and Types of Livestock in the Studied Settlements

Name of studied settlement/ Type of livestock		Bassac River	East Preah Monivong Bridge	Boeng Kak	Boeng Salang
Number of poultry	1-5	0	25	6	31
	6-9	4	20	4	18
	10-15	0	2	0	4
Number of pigs	1-2	15	20	2	40
	3-5	7	9	6	0
Number of cows/buffalo/horses		1-2	0	12	0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Another difference in the physical characteristics of slum and squatter houses is that the majority of houses in this area are above ground level, even though flooding is not as great a threat as in squatter areas. The ground floor levels are, however, used as shelter for the livestock. As in squatter areas, the crowded condition contributes to the increased risk of fire and disease. Again, the number of people living in the same house is as high or even higher than in squatter settlements. As shown in Table 4-1.7, 90 per cent (63 households) of the interviewed households in the slum area live in very crowded conditions, comprising 26 households (37.1 per cent) with between 10 and 15 members per household and 37 households (52.9 per cent) with more than 15 members per household.

Table 4-1.7: Number of Members Per Household of the Studied Settlements

Name of the settlement	1 person		2-5 persons		6-9 persons		10-15 persons		More than 15 persons	
	No.	%	No.	%	No.	%	No.	%	No.	%
Bassac River	0	0	17	24.3	50	71.4	3	4.3	0	0
East Preah Monivong Bridge	16	22.9	28	40.0	26	37.1	0	0	0	0
Boeng Kak	5	7.1	24	34.3	38	54.3	3	4.3	0	0
Boeng Salang	0	0	3	4.3	4	5.7	26	37.1	37	52.9

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: All percentage s are calculated based on the total number of 70 respondents of each settlement

There are no interviewed households in the studied squatter settlements with more than 15 members per household. Also, there are only 3 households in the Bassac River and 3 households in the Boeng Kak squatter settlements with between 10 and 15 members per household and no such households in the East Preah Monivong Bridge squatter settlement. This shows that although the size of plots and houses in this area is bigger than in the studied squatter areas, the number of inhabitants per dwelling is also higher than in the squatter areas. This means that the living conditions are similar or even worse than in the slum settlement in terms of population density.

- Services and Infrastructure in the Boeng Salang Slum:

Most of the houses in this area are recognised as legal settlements by the government, but the services and infrastructure are still inadequate. This is mainly due to the fact that the area was not developed earlier and because many parts were first vegetable gardens. More than half of the roads are unpaved and have rough surfaces. Many parts are also often flooded. The road system is in as poor a state or even worse than in the studied squatter settlements, particularly the inner areas where people have settled over the swampy lake. However, because technical experts planned the road infrastructure some time ago, the area is better connected than squatter settlements and it is only the lack of financial ability to rebuild or maintain the infrastructure that hampers access.

Again, because the area is under the jurisdiction of the municipality, schools and other facilities are provided by the authorities. Thus, the availability of the service in the area has no impact on the level of school attendance in this slum settlement. However, the government does not have the capacity to provide medical facilities and, as for most of the country's population, it remains inadequate regardless of the settlement. It is noted that most households (and all of the interviewed households) have their own toilets.

Electricity is available in the area since the city's electrical stations have increased their capacity, but only for those who can afford the charges. Table 4-1.8, however, indicates that 78.6 per cent of the population has electricity, including legal connections to government supply lines. The Chi-square test result shows there is a significant association between income distribution and electricity supply ($p = 0.008 < 0.05$). According to Table 4-1.8, the majority of the middle- and low income population have access to the electricity supply although among those who has no electricity are dominated by the low-income population of this.

In comparison with the households in the city as a whole, the percentage of households in this slum settlement with access to electricity (including public supplies, private and personal generators and batteries) is higher. In the slum settlement 87.1 per cent of households have access to electricity compared with around 80 per cent¹⁵ in the city as a whole (comprising around 65 per cent who

¹⁵Source: Obtained from H. E. Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

have access to public supply, while the rest have other sources). The percentage is lower than in the Boeng Kak squatter settlement, but higher than in the Bassac River and East Preah Monivong Bridge squatter settlements. In short, the level of electricity supply is similar in both slum and squatter settlements.

Table 4-1.8: The Relationship between Income and Electricity Supply in the Studied Boeng Salang Settlement

Level of income	Energy Source							
	No electricity		Private source		Public source		Own generator or battery	
	No.	%	No.	%	No.	%	No.	%
Low income	8	11.4	24	34.3	6	8.6	0	0
Middle income	1	1.4	22	31.4	3	4.3	6	8.6
Total (70 respondents = 100 %)	9	12.9	46	65.7	9	12.9	6	8.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as $\chi^2 = 22.23, p = 0.008 < 0.05 - S$.

Water supply in the area is indeed better than in the studied squatter areas, as main public water pipes are available. Table 4-1.9 points out that 68.6 per cent of the interviewed population receives water from the public supply, comprising 60 per cent from public water pipes and 8.6 from indoor water pipes. At the same time, 4.3 per cent of households draw water from wells and 27.1 per cent buy water from vendors. Those who buy water from vendors mostly live over the swampy lake, where the public supply is not available and the lake is used as a sewage disposal site. The Chi-square test result reveals there is no significant association between water supply and the level of income of the population ($p = 0.077 > 0.05$).

Since the service is the responsibility of and is provided by public authorities, most of the area has public pipes and wells. Those who buy water from vendors live mostly on the edge of the Salang lake, some distance from the services. Therefore, even if these households are in the higher income level, they still do not have the choice of having the services installed in their houses. Hence, income seems to have no impact on access to these services in the area, as it has already been installed. Yet, the percentage of households in this settlement with access to the public water supply is higher than in the city as a whole. Only around 40 per cent¹⁶ of the city's households have access to the public water supply compared with 68.6 per cent in this settlement. The percentage is still the highest when compared with the three squatter settlements.

¹⁶Source: Obtained from H. E. Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

Table 4-1.9: The Relationship between Income Distribution and Water Supply in the Studied Boeng Salang Settlement

Level of income	Water Source							
	Buy from vendors		From well		Public pipe		Indoor pipe	
	No.	%	No.	%	No.	%	No.	%
Low income	12	17.1	2	2.9	24	34.3	3	4.3
Middle income	7	10.0	1	1.4	18	25.7	3	4.3
Total:	19	27.1	3	4.3	42	60.0	6	8.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as $\chi^2 = 15.51, p = 0.077 > 0.05$ - N.S.

As in the case of water supply, where income seems to have no impact on access to the service, the sewage system in this area is the responsibility of the authorities and is supplied free of charge. According to Table 4-1.10, those who have no sewage system, regardless of their income, live far from where the service is provided along the banks of the lake. This is because the Chi-square test result reveals there is no significant association between access to the sewage system and level of income ($p = 0.093 > 0.05$).

Table 4-1-10: The Relationship between Income Distribution and Sewer Utility in the Studied Boeng Salang Settlement

Level of income	Type of sewage system					
	No sewage		In good condition		In poor condition	
	No.	%	No.	%	No.	%
Low income	6	8.6	16	22.9	16	22.9
Middle income	4	5.7	17	24.3	11	15.7
Total (70 respondents = 100 %)	10	14.3	33	47.1	27	38.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as $\chi^2 = 10.83, p = 0.093 > 0.05$ - N.S.

In this area the sewage system is commonly open canals connected to the nearby lake or the city's public sewage system, depending on the location of the house. Table 4-1.10 also shows that only 14.3 per cent of households in the area have no sewage system¹⁷, while the remaining 85.7 with a sewage system comprise 47.1 per cent in a relatively good condition and 38.6 per cent in a poorer condition. Yet, the percentage of households in this settlement with access to a sewage service is higher than in the city as a whole.

Only around 65 per cent¹⁸ of the city's households have access to a public sewage system compared with 85.7 per cent in this settlement. The percentage in this slum settlement is still lower than in East Preah Monivong Bridge squatter settlement, but higher than in the Bassac River and

¹⁷ However, these houses use the lake as a sewage system, since the houses are built over the lake (see photo 5).

¹⁸Source: Obtained from H. E. Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

Boeng Kak squatter settlements. Therefore, the availability of the service, in general, is similar in both the slum and squatter settlements.

It is noted that the service of waste collection and disposal is available in most parts of this area, except for those households who live over the lake, regardless of their level of income. Therefore, geographical location seems to determine each household's access to the service. The Chi-square test result in Table 4-1.11 reveals there is a significant association between the service of waste collection and disposal and level of income ($p = 0.014 < 0.05$). According to the Table, the majority of the middle- and low-income households have access to a waste collection and disposal service although the low income group is dominated among those who have no service.

Table 4-1.11: The Relationship between Income Distribution and Waste Collection and Disposal in the Studied Boeng Salang Settlement

Level of income	Type of waste collection system					
	No waste collection service		Efficient service		Inefficient service	
	No.	%	No.	%	No.	%
Low income	9	12.9	16	22.9	13	18.6
Middle income	1	1.4	23	32.9	8	11.4
Total (70 respondents = 100 %)	10	14.3	39	55.7	21	30.0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as $\chi^2 = 15.90, p = 0.014 < 0.05 - S$.

In comparison with city as a whole, the percentage of households in this area with access to the service is lower. Only 85.7 per cent of the settlement's households have access to the service compared with around 95 per cent¹⁹ of the city's households. However, the percentage is the highest compared with the three squatter settlements. However, although the number of the households with access to the service in this settlement is higher than in the squatter settlements, those that live over the lake have no access to the service. In other words, geographical location is still the determining factor in access to the service in both the slum and squatter settlements.

¹⁹Source: Obtained from H. E. Kry Beng Hong- Vice governor of Phnom Penh municipality, February 1998.

4.2 Type and Status of Migration of the Interviewed Population

This section aims to examine the aspects of migration identified during the field survey and to test the findings against the literature reviews in the earlier chapters. The study is carried out for both the interviewed squatter and slum populations. According to an earlier chapter, many types of migration that relate to place of origin (both place of birth and place of residence before moving to the city) are found. However, only three main types of migration are relevant to this study: migration from other cities to Phnom Penh, rural-to-Phnom Penh migration and immigration (or international migration).

The other two types (returnee migration and intra-migration) are included under rural-to-Phnom Penh and other cities to Phnom Penh migration, as discussed in Chapter 2. The term migration, however, is defined as the process of movement of people from their place of birth or last place of residence to another destination, within or outside the country, for a period longer than 6 months (see Chapter 2). This process of movement does not necessarily occur only once, but could occur many times, as often found among migrants in Cambodia as a result of its recent and uniquely troubled history (see figure: 2.1-1).

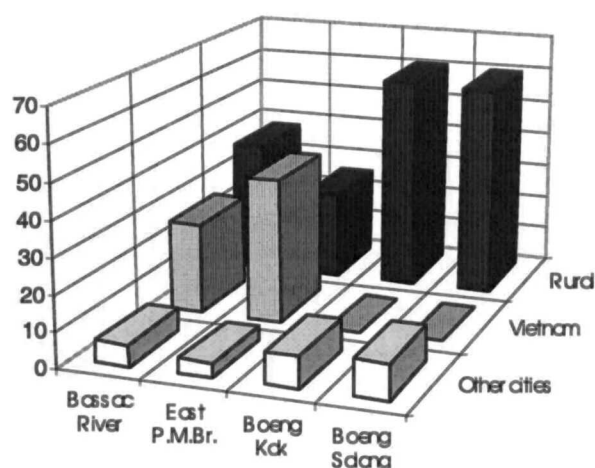
Likewise, migration status in this study is categorised into two types (see Chapter 2), long-term and new migrants. The long-term migrants are defined in the earlier chapter as those who moved to the city at least 5 years ago (or before 1993), while new migrants are those who have lived in the city for a shorter period than 5 years (or from 1993 to 1997). The examination and discussion of the above two criteria are important in testing the hypotheses of this paper in terms of whether the type and status of migrants impact on the search for accommodation, type of job and level of income of migrant respondents in the city.

- Type of migration:

In general, according to Figure 4-2.1, the majority of the studied population are rural-Phnom Penh migrants, which is the same in the Bassac River, Boeng Kak and Boeng Salang settlements. In contrast, Vietnamese immigrants dominate in the East Preah Monivong Bridge settlement. The

figure also shows that there are no Vietnamese immigrants in the Boeng Kak and Boeng Salang settlements.

Figure 4-2.1: Places of Residence before Migration to Phnom Penh of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

Table 4-2.1 reveals that the majority of the interviewed populations of the Bassac River, Boeng Kak and Boeng Salang settlements had lived in other parts of Phnom Penh before moving to the squatter and slum areas. In contrast, the majority of the population of the East Preah Monivong Bridge settlement has moved directly from Vietnam and rural areas to the studied squatter settlement. Although it is too early to draw any conclusion from this finding, it does imply that the majority of the studied population had spent some time in the city before they finally moved into the squatter and slum settlements.

Table 4-2.1: Places of Residence of the Studied Population before Moving to the Studied Settlements

Place of residence before migrating to Phnom Penh	The studied settlements							
	Bassac River		East Preah Monivong		Boeng Kak		Boeng Salang	
	N	%	N	%	N	%	N	%
Rural	3	4.3	20	28.6	8	11.4	21	30.0
Other cities	0	0	4	5.7	9	12.9	2	2.9
Phnom Penh	46	65.7	14	20.0	53	75.7	47	67.1
Vietnam	21	30.0	32	45.7	0	0	0	0
Total	70	100	70	100	70	100	70	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Furthermore, it is very difficult to draw any conclusion about the differences in the composition of each settlement's population, but perhaps an important factor would be the geographical location of each settlement. For example, the Vietnamese immigrants are concentrated in the Bassac River and East Preah Monivong Bridge squatter settlements because these areas are located close to waterways. However, further investigation of this matter is needed.

Since the squatter settlements are the main target of this research, Table 4-2.2 was compiled using data from only these. The table reveals that the Bassac River squatter settlement was first invaded in 1989, which is earlier than noted in government reports¹. However, these findings partly corroborate the government reports in that the size of the population in this area reportedly increased dramatically between 1993 and 1997. In other words, it is reported that the squatter settlement population increased drastically before, during and after the country's general election.

Table 4-2.2: Dates of Moving to the Studied Squatter Settlements by the Place of Residence before Migration to the City

Place of residence before migrating to Phnom Penh	Bassac River			East Preah Monivong Bridge			Boeng Kak	
	1989-90	1991-92	1993-97	1979-90	1991-92	1993-97	1991-92	1993-97
Rural	11 13.9	4 5.7	23 32.9	12 17.1	4 5.7	9 12.8	16 22.9	45 64.3
Other cities	2 2.9	1 1.4	3 4.3	0 0	4 5.7	0 0	2 2.9	7 10.0
Vietnam	3 4.3	4 5.7	19 27.1	4 5.7	4 5.7	33 47.1	0 0	0 0
Total	16 22.9	9 12.9	45 64.3	16 22.8	12 17.1	42 60.0	18 25.7	52 74.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

In the case of the East Preah Monivong Bridge squatter settlement, the table shows that the settlement has been occupied since 1979 and that the population of the area increased dramatically between 1993 and 1997. Thus, like in the case of the Bassac River settlement, its population increased drastically before, during and after the general election of the country in 1993. The table further reveals that the Boeng Kak squatter settlement has been invaded or occupied since 1991 in contrast with the government report, which claims that the area was squatted only after 1992 during the run-up to the national election².

¹ Many Khmer language reports, including those of the Phnom Penh Municipality since 1990, point out that Bassac River was invaded or squatted in 1991.

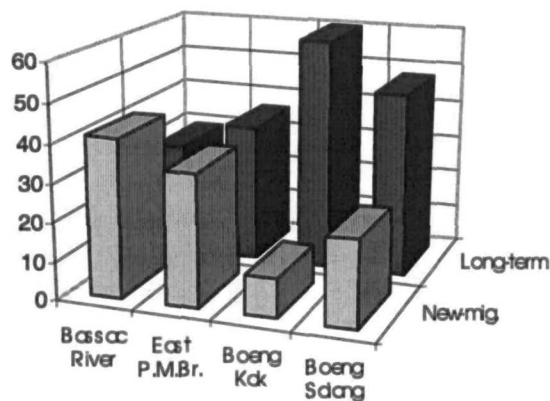
² Sources: Unpublished Khmer language reports obtained during the fieldwork in 1996-1997 from various district authorities of Phnom Penh Municipality.

It is, however, likely that during that time the government neglected to collect data on the population of the area. Also, between 1991 and 1992 only a small number of squatter houses were erected in the area and they were well hidden from authorities (personal interview with Cambodian NGO staff during the fieldwork in 1996-1997). Therefore, it is true that the area was squatted since 1991, as claimed by the squatters.

- Status of migration:

According to Figure 4-2.2, the majority of the populations in all the studied settlements are long-term migrants who migrated to Phnom Penh before 1992, while the rest are new migrants who arrived in the city after 1992². However, the figure also indicates that the studied settlements have different migration status profiles. In the Bassac River squatter settlement the majority of the population is long-term migrants in contrast to the East Preah Monivong Bridge, Boeng Kak and Boeng Salang settlements, where the majority of their populations are new migrants.

Figure 4-2.2: Dates of Migration to Phnom Penh of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

Although new migrants dominate in the last three, the proportion is different in each area. East Preah Monivong Bridge has only slightly more new migrants than long-term migrants (36 to 34 respondents), while in Boeng Kak there are up to five times more new migrants than long-term

²See Appendix 3 for the explanation of how the status of migration is defined.

migrants (60 to 10 respondents) and Boeng Sang has more than double the number of new migrants to long-term migrants (48 to 22 respondents).

In general, according to Table 4-2.3, the majority of the studied population is rural-to-Phnom Penh and long-term migrants. However, this not true of all the settlements, as the Chi-square test results show that there is no significant association between the type of migrants and their status in the Bassac River settlement ($p = 0.14 > 0.05$). At the same time, the majority of the population in this settlement is a combination of rural-Phnom Penh, long-term and new migrants as well as new Vietnamese immigrants. In contrast, the Chi-square test results show that there is a significant association between the type of migrants and their status in the cases of the East Preah Monivong Bridge, Boeng Kak and Boeng Salang settlements (all $p = 0.001 < 0.05$).

In the case of East Preah Monivong Bridge, rural-Phnom Penh and other cities-Phnom Penh migrants are long-term migrants, while the Vietnamese immigrants are mostly new migrants. Similarly, in the case of the Boeng Kak squatter settlement and Boeng Salang slum settlement, rural-Phnom Penh and other cities-Phnom Penh migrants also are long-term migrants. In short, unlike in the case of other developing countries - as mentioned in the literature review - where the majority of squatters are new migrants, in the case of Phnom Penh city's squatter settlements the majority of squatters are long-term, established residents.

Table 4-2.3: Dates of Migration to Phnom Penh by Place of Residence before Migration to the City

Type of migrant	Status of migrant							
	Bassac River		East Preah Monivong		Boeng Kak		Boeng Salang	
	Long-term	New	Long-term	New	Long-term	New	Long-term	New
Rural-P.Penh	19 27.1	19 27.1	20 28.6	5 7.1	52 74.3	9 12.9	38 54.3	22 31.4
Other cities-P.Penh	3 4.3	3 4.3	4 5.7	0 0	8 11.4	1 1.4	10 14.3	0 0
Vietnamese immigrant	7 10.0	19 27.1	12 17.1	29 41.4	0 0	0 0	0 0	0 0
Total	29 41.4	41 58.6	36 51.4	34 48.6	60 85.7	10 14.3	48 68.8	22 31.4

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 12.11, p = 0.14$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 55.47, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 22.73, p = 0.001 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 71.22, p = 0.001 < 0.05$ - S.

The reason behind the finding that the majority of Vietnamese immigrant squatters are new migrants is because most of them are illegal immigrants and long-term temporary residents who migrated to Cambodia and specifically Phnom Penh after the election in 1993³. It is noticed that after the 1993 election, when the situation in Cambodia settled down, a new wave of Vietnamese immigrants flocked to Cambodia and most of them ended up in Phnom Penh (Source: as footnote 5). However, further in-depth interviews with Vietnamese immigrants are needed in order to verify this.

³ Sources: Personal correspondence and interviews with various experienced staff members of the Phnom Penh Municipality and other staff of the Ministry of the Interior during the fieldwork in 1996-1997 and afterwards.

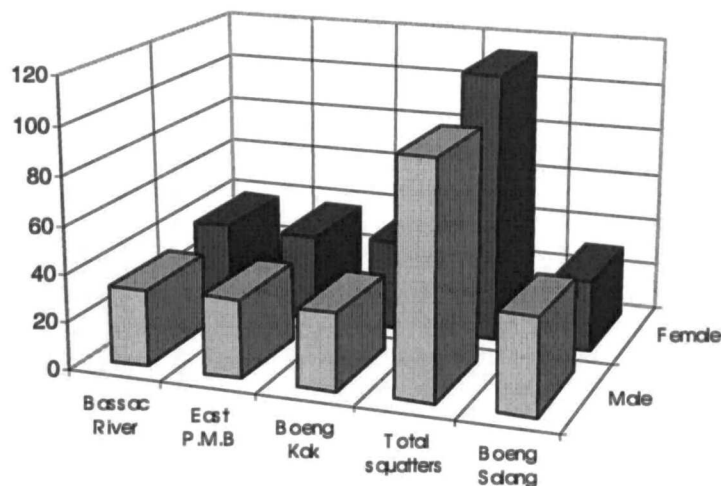
4-3 The Demographic Characteristics of the Studied Population

This section aims to identify some important characteristics of the interviewed population relating to gender, age and marital status. The study looks at these characteristics in terms of type and status of migration to clarify them and provide more details for the discussion. The settlements are again examined separately.

- Gender:

In general, according to Figure 4-3.1, the majority of the squatter population is female, which is true for all three the studied squatter settlements. In contrast, men dominate their female counterparts in the studied slum settlement. According to Table 4-3.1, males dominate among rural- and other cities-Phnom Penh migrants, while women dominate among Vietnamese immigrants in the squatter settlements. This corroborates the findings in other areas of the city where the number of women is higher than that of men (50.9 per cent, while in rural areas the percentage is 52.18)¹.

Figure 4-3.1: Gender Structure of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

¹ "Females outnumbered men in the Cambodian population. This was true for both urban and rural areas." (Page 13). Source: Report on the Socio-economic Survey of Cambodia 1993/1994 (All Rounds); National Institute of Statistics, Ministry of Planning; The Royal Government of Cambodia.

However, the results of Chi-square tests of the association between gender and type of migration in Table 4-3.1 show that the situation is not the same in the different squatter and slum settlements. In the cases of the Bassac River and Boeng Kak squatter settlements, the tests show there is no significant association between type of migration and gender ($p = 0.73 > 0.05$ and $p = 0.58 > 0.05$).

In contrast, the tests highlight a significant association between type of migration and gender in the cases of the East Preah Monivong Bridge squatter settlement and the Boeng Salang slum settlement ($p = 0.003$ and $0.001 < 0.05$). In the East Preah Monivong Bridge settlement, the majority of rural- and other cities-Phnom Penh migrants are male, while the majority of Vietnamese immigrants are female. In the Boeng Salang slum settlement, although there are equal numbers of male and female rural-Phnom Penh migrants, there are more men among the other cities-Phnom Penh migrants.

Table 4-3.1: Migration Type by Gender of the Studied Population

Place of residence before migration to Phnom Penh	Gender of the studied settlements' population							
	Bassac River		East Preah Monivong		Boeng Kak		Boeng Salang	
	Male	Female	Male	Female	Male	Female	Male	Female
Rural-Phnom Penh	17 24.3	21 30.0	21 30.0	4 5.7	26 37.1	35 50.0	30 42.9	30 42.9
Other cities-P. Penh	4 5.7	2 2.9	4 5.7	0 0	6 8.5	3 4.3	10 14.3	0 0
Vietnamese immigrant	11 15.7	15 21.3	8 11.4	33 47.1	0 0	0 0	0 0	0 0
Total	32 45.7	38 54.3	33 47.1	37 52.9	32 45.7	38 54.3	40 57.2	30 42.9

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 1.27, p = 0.73$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 32.57, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 1.91, p = 0.58$ - N.S.

Boeng Salang settlement: $\chi^2 = 11.38, p = 0.003 < 0.05$ - S.

In general and according to Table 4-3.2, men dominate among long-term migrant squatters and slum settlers, while women dominate among new migrants. However, the results of the Chi-square tests show there is only one case, that of the Boeng Salang slum settlement ($p < 0.05$), where there is a significant association between gender and migration status of the population. In that case, the majority of long-term migrant slum settlers are male, while new migrants are mostly women. Further investigation is needed to reveal the reason for the different associations between gender and type and status of migration of the population. However, it is not the main subject of this study and due to the researcher's financial and time constraints no further field studies were conducted to investigate this matter.

Table 4-3.2: Migration Status by Gender of the Studied Population

Place of residence before migration to Phnom Penh	Gender of the studied settlements' population							
	Bassac River		East Preah Monivong		Boeng Kak		Boeng Salang	
	Male	Female	Male	Female	Male	Female	Male	Female
Long-term migrant	15 21.4	14 20.0	30 42.9	6 8.6	29 41.4	31 44.3	32 45.7	16 22.9
New migrant	17 24.3	24 34.3	3 4.3	31 44.3	3 4.3	7 10.0	8 11.4	14 20.0
Total	32 45.7	38 54.3	33 47.1	37 52.9	32 45.7	38 54.3	40 57.1	30 42.9

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 2.73$, $p = 0.25$ - N.S.

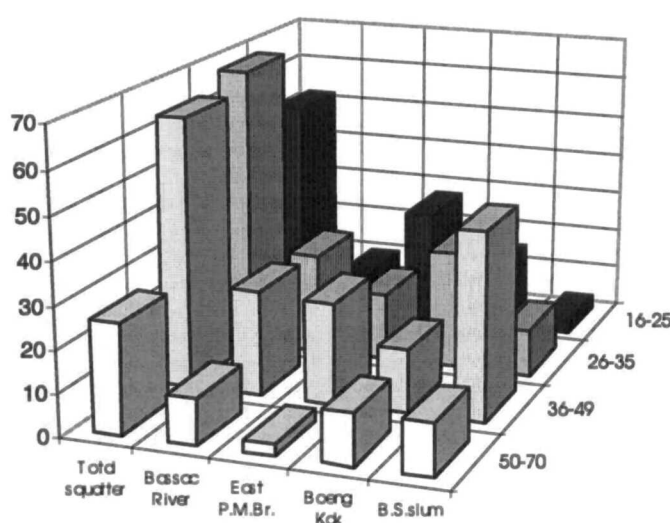
East Preah Monivong Bridge settlement: $\chi^2 = 32.57$, $p < 0.05$ - N.S.

Boeng Kak settlement: $\chi^2 = 2.97$, $p = 0.22$ - N.S.

Boeng Salang settlement: $\chi^2 = 23.44$, $p = 0.001 < 0.05$ - S.

- Age Structure:

In general, according to Figure 4-3.2, the majority of the squatter population are migrants aged 26-35, followed by the age group 36-49 years and those aged 16-25. The situation is slightly different in the studied slum settlement, where the majority of the population is aged 36-49, followed by the age group 50-70 years. Table 4-3.3 and the results of the Chi-square tests of the association between age structure and type of migration show there is a significant association between the population's age structure and migration type in all the squatter and slum settlements (p-coefficients of all settlements are smaller than 0.05).

Figure 4-3.2: Age Structure of the Studied Population

Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In general picture, the majority of rural-Phnom Penh migrants aged between 26 and 49 years old in the Bassac River and East Preah Monivong Bridge squatter settlements and the Boeng Salang slum settlement, while aged 16-35 is the majority in the case of the Boeng Kak squatter settlement. Other cities-Phnom Penh migrants are mostly aged 26-35 in the case of the Bassac River and Boeng Kak squatter settlements, while the group is mostly aged 36-49 in the East Preah Monivong Bridge and Boeng Salang settlements. Although the Vietnamese immigrants are mostly from the 26-35 and 36-49 age groups in the case of Bassac River, they tend to be aged 16-25 in the East Preah Monivong Bridge settlement.

Table 4-3.3: Migration Type by Age Structure of the Studied Population

Migration Type	Bassac River				East Preah Monivong				Boeng Kak				Boeng Salang			
	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70
Rural-Phnom Penh	3 4.3	11 15.7	16 22.9	8 11.4	0 0	7 10.0	16 22.9	2 2.9	15 22.9	24 34.3	13 18.6	9 12.9	3 4.3	9 12.9	36 51.4	12 17.1
Other cities-Phnom Penh	0 0	4 5.7	0 0	2 2.9	0 0	0 0	3 4.3	1 1.4	0 0	4 5.7	2 2.9	3 4.3	0 0	2 2.9	8 11.4	0 0
Vietnamese immigrant	7 10.0	9 12.9	9 12.9	1 1.4	27 38.6	9 12.9	5 7.1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Total	10 14.3	24 34.3	25 35.7	11 15.7	27 38.6	16 22.9	24 34.3	3 4.3	15 22.9	28 40.0	15 21.4	12 17.1	3 4.3	11 15.7	44 62.8	12 17.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 24.59$, $p = 0.01 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 46.73$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 20.48$, $p = 0.01 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 20.66$, $p = 0.002 < 0.05$ - S.

In general and according to Table 4-3.4, long-term migrant squatters and slum settlers are dominated by the population group aged 36-49 years, while their new migrant counterparts are mostly aged 16-25, and 36-49 years in the case of the Boeng Salang slum settlement. The results of the Chi-square tests show there is a significant association between age structure and migration status of the population in all the studied settlements (p - coefficients of all settlements are smaller than 0.05). In the case of the Bassac River, East Preah Monivong Bridge and Boeng Kak settlements, most long-term migrants aged 26-49, while they are mostly aged 36-49 in Boeng Salang settlements. Most new migrants aged 26-49 in the case of the Bassac River and Boeng Salang settlements, while they are younger - aged 16-25 - in the East Preah Monivong Bridge and Boeng Kak settlements.

Table 4-3.4: Migration Status by Age Structure of the Studied Population

Migration status	Bassac River				East Preah Monivong				Boeng Kak				Boeng Salang			
	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70
Long-term migrant	1 1.4	13 18.6	10 14.3	5 7.1	2 2.9	12 17.1	20 28.6	2 2.9	8 11.4	27 38.6	14 20.0	11 15.7	0 0	5 7.1	31 44.3	12 17.1
New migrant	9 12.8	11 15.7	15 21.4	6 8.6	25 35.7	4 5.7	4 5.7	1 1.4	7 10.0	1 1.4	1 1.4	1 1.4	3 4.3	6 8.6	13 18.6	0 0
Total	10 14.3	24 34.3	25 35.7	11 15.7	27 38.6	16 22.9	24 34.3	3 4.3	15 21.4	28 40.0	15 21.4	12 17.1	3 4.3	11 15.7	44 62.9	12 17.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

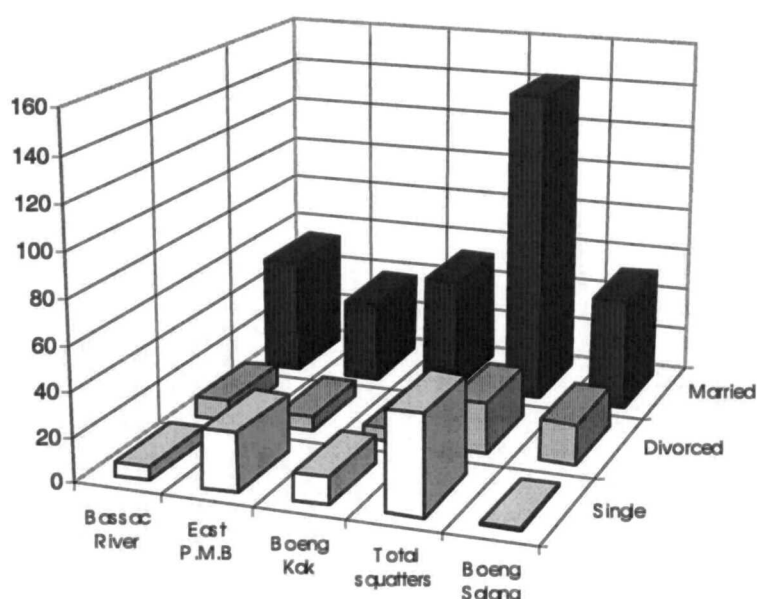
Bassac River settlement: $\chi^2 = 17.12$, $p = 0.008 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 37.29$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 19.75$, $p = 0.003 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 29.86$, $p = 0.001 < 0.05$ - S.

- Marital Status:

Figure 4-3.3: Marital Status of the Studied Population

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

According to Figure 4-3.3, the squatter population is dominated by married migrants, which is true in all three the studied squatter settlements as well as in the slum settlement. According to Table 4-3.5, married migrants dominate in all the settlements, except in the case of East Preah Monivong Bridge, where the majority of Vietnamese immigrants are single. Compared with the city as a whole, the number of single respondents in the studied settlements is much lower (46.6 per cent in the whole city), while the numbers of married and divorced respondents are higher than in the city

as a whole, except in the case of East Preah Monivong Bridge, where the percentage of married migrants is lower than in the city as a whole (44.7 per cent and 8.6 per cent respectively)².

However, the results of the Chi-square tests of the association between the population's marital status and the type of migration, shown in Table 4-3.5, indicate that the situation varies among the different settlements. In the case of the Boeng Kak squatter and Boeng Salang slum settlements, the tests show there is no significant association between type of migration and gender ($p = 0.10 > 0.05$ and $p = 0.16 > 0.05$). In contrast, the tests indicate there is a significant association between the type of migration and gender in the Bassac River and East Preah Monivong Bridge squatter settlements ($p = 0.02 < 0.05$ and $p = 0.001 < 0.05$). In the case of Bassac River settlement, the majority of all types of migrant squatters are married, while in the case of the East Preah Monivong Bridge settlement most rural- and other cities-Phnom Penh migrants are married and most Vietnamese immigrants are single.

Table 4-3.5.: Migration Type by Marital Status of the Studied Population

Type of migrant	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Single	Married	Divorced	Single	Married	Divorced	Single	Married	Divorced	Single	Married	Divorced
Rural-Phnom Penh	0	29	9	0	24	1	12	44	5	1	41	18
	0	41.4	12.9	0	34.3	1.4	17.1	62.9	7.1	1.4	58.6	25.7
Other cities-Phnom Penh	0	5	1	0	4	0	0	8	1	0	10	0
	0	7.1	1.4	0	5.7	0	0	11.4	1.4	0	14.3	0
Vietnamese immigrant	6	20	0	26	9	6	0	0	0	0	0	0
	8.6	28.6	0	37.1	12.9	8.6	0	0	0	0	0	0
Total	6	54	10	26	37	7	12	52	6	1	51	18
	8.6	77.1	14.3	37.1	52.9	10.0	17.1	74.3	8.6	1.4	72.8	25.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 17.15$, $p = 0.02 < 0.05$ - S.

East Preah Monivong Bridge settlement : $\chi^2 = 38.73$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 10.45$, $p = 0.10$ - N.S.

Boeng Salang settlement: $\chi^2 = 6.46$, $p = 0.16$ - N.S.

In general and according to Table 4-3.6, long-term and new migrant squatters and slum settlers are mostly married, except in the case of East Preah Monivong Bridge, where the majority of new migrants are single. Furthermore, the Chi-square test results show there is only one case – that of the Bassac River squatter settlement – where there is no significant association between marital status and the migration status of the population (p -coefficient equals 0.20, which is bigger than 0.05). In general picture for the three settlements where the tests are significance, most long-term

²Source: Report on the Socio-economic Survey of Cambodia 1993/1994 (All Rounds); National Institute of Statistics, Ministry of Planning; The Royal Government of Cambodia.

migrants of the three studied populations are married, while the marital status of their new migrant counterparts vary from settlement to settlement. Although there are equal numbers of married and single new migrant squatters in the case of the Boeng Kak settlement, most of them are married in the East Preah Monivong Bridge and Boeng Salang settlements.

Table 4-3.6: Migration Status by Marital Status of the Studied Population

Migration status	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Single	Maried	Divorced	Single	Maried	Divorced	Single	Maried	Divorced	Single	Maried	Divorced
Long-term migrant	0 0	26 37.1	3 4.3	2 2.9	31 44.3	3 4.3	7 10.0	44 62.9	6 8.6	0 0	36 51.4	12 17.1
New migrant	6 8.6	28 40.0	7 10.0	24 34.3	6 8.6	4 5.7	5 7.1	5 7.1	0 0	1 1.4	15 21.4	6 8.6
Total	6 8.6	54 77.1	10 14.3	26 37.1	37 52.9	7 10.0	12 17.1	52 74.3	6 8.6	1 1.4	52 72.9	18 25.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 5.97$, $p = 0.20$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 38.25$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 11.72$, $p = 0.001 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 22.06$, $p = 0.001 < 0.05$ - S.

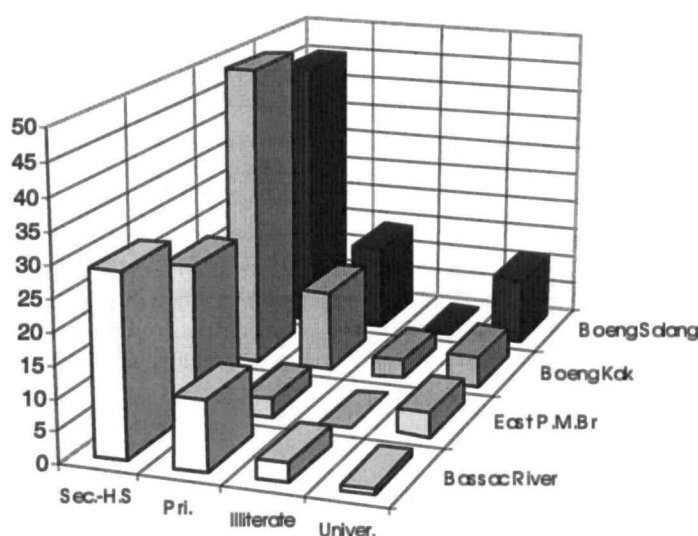
4.4 Socio-economic Characteristics of the Studied Population (Education, Job and Income)

This section provides a description of the living standards of the studied population in all the studied settlements, including the level of education, type of job and level of income. These three are known as the main factors and are often used by scholars in studying the reasons for migration and squatting. For example, in most developing countries the reason for migration most commonly accepted by scholars is the search for better jobs and higher income, because migrants are believed to be poor. It is further believed that type and status of migration impact on the ability to find employment and accommodation in cities. This section discusses these important factors.

- Education:

Since the Vietnamese interviewees cannot utilise their academic knowledge in Cambodia due to the language difference, their level of education is not the subject of this study because it has no impact on their daily lives in Cambodia. Their skills - and not their level of education - are important in earning a living in Cambodia. For example, a blacksmith or skilled construction worker, who obtained such skills from relatives rather than from any formal training, can earn far more than Vietnamese migrants trained as academics or medical doctors. These types of Vietnamese professionals are unlikely to find jobs in Cambodia that suit their level of education and would provide them with the same level of income as in Vietnam (As fully discussed in Box-1).

Figure 4-4.1: Educational Attainments of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

According to Figure 4-4.1, in all settlements of this study, no educational attainment higher than a university degree was found, and there are only a handful of university graduates. The majority of the studied population has educational attainments between secondary-high school level, which is the same in all the studied settlements. The figure also shows that the literacy rate of all the studied settlements is obviously lower than the average of 12.0 per cent¹ in the city as a whole.

Box-1: Education and the capacity to earn a living. The case of the Vietnamese interviewee (Mr. Nguen Van Thanh)

Mr. Nguen was 42 years old and married with two daughters living with him at the time of the interview in December 1996. As all his relatives, he was born in Vietnam. There, he was a medical doctor working as a civil servant in the Vietnamese department of public health. He did not have an income other than his government salary, since neither his wife nor his two daughters (students) worked at that time. As a result, his living conditions were poor and rather desperate. He decided to migrate to Phnom Penh with his family in the late 1990s to improve their living conditions. He decided on Phnom Penh because many of his relatives (Vietnamese) who live in the city had promised him a better job with higher income there. He did receive help from them, as promised, in that they provided him with accommodation and helped him to find a job when he arrived in Phnom Penh. He came to the city alone at first and remained so for 5 months, after which he brought his wife and two daughters to live with him. During the early period of his stay in the city, Mr. Nguen had worked as a private medical practitioner in his own single-room family clinic, which he rented and later bought, targeting the Vietnamese community in the city in particular.

However, his income was not sufficient to support his family due to many reasons (lack of contacts among the Vietnamese community, the fact that many Vietnamese families in his community were poor etc.). As a result, he closed the clinic in early 1992 and turned it into a cafe shop, which he runs with his wife and daughters. Since then, his family's living conditions have improved to the extent where he can afford a high middle-income lifestyle with two motorbikes, refrigerator, colour T.V., video cassette player and other luxuries. Mr. Nguen concluded that he and his family are satisfied with the current state of the family business, although he feels his educational qualification as a medical doctor is wasted. He added that the help he received from his relatives and friends was vital to his successful migration, especially in securing his current accommodation and job.

The relationship between the studied population and the educational attainments, which is shown in Table 4-4.1, in general, reveals that all members of the illiterate population are from rural areas. The Chi-square test results reveal that there is a significant association between the migration type and educational attainment in all the studied settlements (all $p < 0.05$). In the cases of the Bassac River, East Preah Monivong Bridge, Boeng Kak squatter and Boeng Salang slum settlements, other

¹According to the Socio-economic Survey of Cambodia, of the National Institute of Statistics, Ministry of Planning, p. 5. 1994, Phnom Penh, Cambodia.

cities-Phnom Penh migrants tend to be better educated (none of them are illiterate) than their rural-Phnom Penh counterparts. This finding corroborates with the general picture of the country's situation where according to the National Institute of Statistics (1996: p.17) the rate of literacy in urban areas (80.2 per cent) is higher than that in rural areas (66.8 per cent).

Table 4-4.1: Educational Attainments of the Studied Population (excluding the Vietnamese) by Migration Type

Level of education	Bassac River				East Preah Monivong				Boeng Kak				Boeng Salang			
	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University
Rural-P. Penh	3 4.3	8 11.4	26 37.1	1 1.4	0 0	3 4.3	20 28.6	2 2.9	3 4.3	9 12.9	44 62.9	5 7.1	0 0	14 20.0	37 52.9	9 12.9
Other cities- P. Penh	0 0	3 4.3	3 4.3	0 0	0 0	0 0	2 2.9	2 2.9	0 0	4 5.7	5 7.1	0 0	0 0	0 0	8 11.4	2 2.9
Total	3 4.3	11 15.2	29 41.4	1 1.4	0 0	3 4.3	23 32.9	4 5.7	3 4.3	13 18.6	49 70.0	5 7.1	0 0	14 20.0	45 64.3	11 15.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 85.50$, $p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 83.08$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 18.97$, $p = 0.02 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 16.73$, $p = 0.002 < 0.05$ - S.

In terms of the relationship between the population's status of migration and educational attainment, Table 4-4.2 reveals that, in general, long-term migrants comprise the majority of the illiterate rural-Phnom Penh population. However, the majority of those who hold the highest level of education are also long-term migrants. The Chi-square test results of the relationship between the status of migration and educational attainment reveal that the situation varies among the different studied populations. In the case of the Bassac River and Boeng Kak squatter settlements, the tests show there is no significant association between the two variables of education and status of migration of the population.

In contrast, the tests reveal there is a significant association between the two variables of education and status of migration of the population in the East Preah Monivong Bridge squatter and Boeng Salang slum settlements. In these two settlements, long-term migrants tend to be better educated than their new migrant counterparts, since all of those who have university degrees are long-term migrants. However, in the case of Boeng Salang, new migrants tend to be higher educated than their long-term migrant counterparts, since the majority of those who have a university education

are new migrants. In short, it is difficult to draw a conclusion since the numbers of the settlements that are statistically significant equal to those of statistically insignificant.

Table 4-4.2: Educational Attainment of the Studied Population (excluding the Vietnamese) by Migration Status

Level of education	Bassac River				East Preah Monivong				Boeng Kak				Boeng Salang			
	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University	Illiterate	Primary	Secondary-high school	University
Long-term migrant	1 1.4	6 8.6	14 20.0	1 1.4	0 0	2 2.9	19 27.1	4 5.7	3 4.3	10 14.3	42 60.0	5 7.1	0 0	8 11.4	37 52.9	3 4.3
new migrant	2 2.9	5 7.1	15 21.4	0 0	0 0	1 1.4	4 5.7	0 0	0 0	3 4.3	7 10.0	0 0	0 0	6 8.6	8 11.4	8 11.4
Total	3 4.3	11 15.7	29 41.4	1 1.4	0 0	3 4.3	23 32.9	4 5.7	3 4.3	13 18.6	49 70.0	5 7.1	0 0	14 20.0	45 64.3	11 15.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 7.63$, $p = 0.46$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 41.15$, $p = 0.001 < 0.05$ - S.

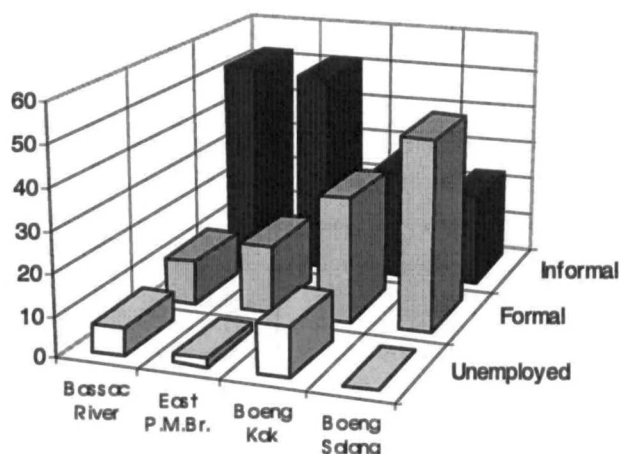
Boeng Kak settlement: $\chi^2 = 4.17$, $p = 0.65$ - N.S.

Boeng Salang settlement: $\chi^2 = 15.71$, $p = 0.003 < 0.05$ - S.

- Employment:

Regarding job status, Figure 4-4.2 reveals that the majority of the studied population is employed in the informal sector of the city's economy. However, this is not the case for the Boeng Salang slum settlement, where the majority of its population is employed in the formal sector of the city's economy. It also reveals that the rate of unemployment is varied among the studied settlements, and no unemployed migrants are found in the Boeng Salang slum settlement. Moreover, the 10.0 per cent (7 respondents) unemployment rate in Bassac River and 17.1 per cent (12 respondents) unemployment rate of the Boeng Kak settlement are higher than the average of 7.9 per cent² for the whole city.

²According to "Demographics Survey of Cambodia 1996, General Report" of the National Institute of Statistics, Ministry of Planning, P.29, October 1996, Phnom Penh, Cambodia.

Figure 4-4.2: Employment Types of the Studied Population

Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In terms of the relationship between the status of migration and employment type, Table 4-4.3 reveals that all but one of the unemployed respondents are rural-Phnom Penh migrants. The Chi-square test results of the relationship between migration type and employment status reveal that the situation varies among the studied settlements. In the Bassac River, East Preah Monivong Bridge squatter and Boeng Salang slum settlements, the tests show there is a significant association between the two variables of employment status and migration type of the population ($p < 0.05$) in contrast to the case of Boeng Kak ($p > 0.05$).

In the case of the Bassac River and East Preah Monivong Bridge squatter settlements, all of those who were unemployed are rural-Phnom Penh migrants and no other cities-Phnom Penh migrants and Vietnamese immigrants are found to be unemployed. However, rural-Phnom Penh migrants also dominate among those who were employed in the formal sector compared to other cities-Phnom Penh migrants and Vietnamese immigrants. It is not surprising that all the Vietnamese immigrants are employed, since they have to find work in order to survive in a foreign country. In the case of the Boeng Salang slum settlement, as with the two squatter settlements, other cities-Phnom Penh migrants also dominate among those who were employed in the formal sector compared to their rural-Phnom Penh counterparts. As presented in Box - 2, this is mainly because most employers perceive the population from rural areas as lacking in intelligence, even if they are as educated as workers from urban areas are. This is the adverse impact of the historically

colonialist view of Cambodia, which needs to change to improve the future of the entire population³.

Table 4-4.3: Types of Employment of the Studied Population by Migration Type

Migration Type	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker
Rural-P. Penh	7 10.0	21 28.6	10 14.3	2 2.9	9 12.9	14 20.0	11 15.7	21 30.0	29 41.4	0 0	21 30.0	39 55.7
Other cities-P. Penh	0 0	5 7.1	1 1.4	0 0	2 2.9	2 2.9	1 1.4	6 8.6	2 2.9	0 0	2 2.9	8 11.4
Vietnamese immigrant	0 0	26 37.1	0 0	0 0	40 57.1	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0
Total:	7 10.0	52 74.3	11 15.7	2 2.9	51 72.9	17 24.3	12 17.1	27 38.6	31 44.3	0 0	23 32.9	47 67.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 75.34$, $p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement : $\chi^2 = 83.25$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 13.16$, $p = 0.35$ - N. S.

Boeng Salang settlement: $\chi^2 = 17.29$, $p = 0.008 < 0.05$ - S.

In terms of the relationship between the population's status of migration and employment type, Table 4-4.4 reveals that, in general, the majority of the unemployed population are long-term migrants. The results of the Chi-square test of the relationship between migration status and employment type reveal that there is a significant association between the two variables in all the studied settlements ($p < 0.05$).

In general picture of the four settlements, long-term migrants dominate among those who were unemployed compared with new migrants. In the case of the Bassac River settlement, new migrants dominate among those who were employed in both the formal and informal sectors (7 and 32 out of 41 respondents respectively) compared with the long-term migrants (4 and 20 out of 29 respondents respectively). In the case of East Preah Monivong Bridge squatter and Boeng Salang slum settlements, long-term migrants dominate among those who were employed in the formal sector of the city economy compared to their new migrant counterparts. In contrast with the case of the Bassac River settlement, in the Boeng Kak settlement long-term migrants dominate among those who were employed in either sector compared with new migrants. In short, the situation differs among the studied settlements.

³ According to the personal interviews with many elderly, experienced professionals at the Municipality of Phnom Penh and Ministry of Planning before, during and after the field survey 1996-1997.

However, in general, long-term migrants tend to dominate among those who are unemployed and, if they are employed, they tend to be in the formal sector compared with new migrants. This is mainly due to the fact that first, in the case of the unemployed, they are not selective according to the profile of new migrants found in other developing countries, such as in the case studies⁴ of Schultz: 1982, Turnham: 1993, Brown & Foot: 1994 and Harris: 1996. Secondly, in terms of types of jobs, long-term migrants have more experience and a better understanding of the city than the new migrants, which give them the advantage in obtaining work in the formal sector. In contrast, new migrants find it easier to enter the urban labour market via the informal sector, as is found in other developing countries (sources: as footnote 4) and as pointed out by Spear et al (1988) and Stark (1991).

Table 4-4.4: Types of Employment of The Studied Population by Migration Status

Migration Type	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker	Unempl oyed	Informal worker	Formal worker
Long-term migrant	5 7.1	20 28.6	4 5.7	0 0	21 30.0	15 21.4	11 15.7	20 28.6	29 41.4	0 0	11 15.7	37 52.9
new migrant	2 2.9	32 45.7	7 10.0	2 2.9	30 42.9	2 2.9	1 1.4	7 10.0	2 2.9	0 0	12 17.1	10 14.3
Total:	7 10.0	52 74.3	11 15.7	2 2.9	51 72.9	17 24.3	12 17.1	27 38.6	31 44.3	0 0	23 32.9	47 67.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 30.92, p = 0.006 < 0.05$ - S.

East Preah Monivong Bridge settlement : $\chi^2 = 37.73, p = 0.001 < 0.05$ - S.

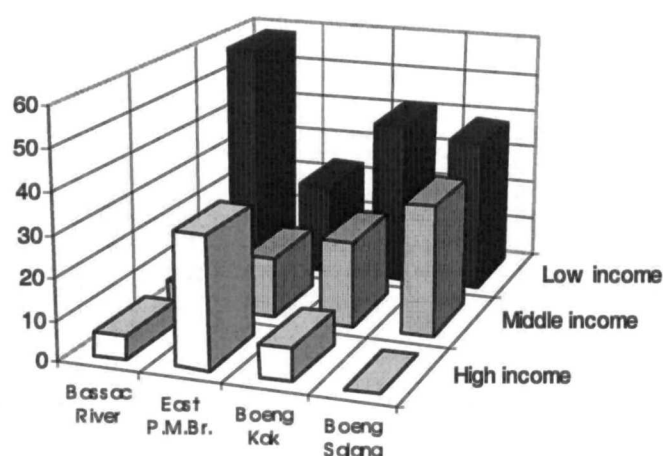
Boeng Kak settlement: $\chi^2 = 20.21, p = 0.009 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 33.36, p = 0.001 < 0.05$ - S.

- Income:

In general, Figure 4-4.3 reveals that the majority of the studied population have a low level of income, which applies to all the studied settlements except the East Preah Monivong Bridge squatter settlement, where the population is dominated by the high income group. The Figure also shows that there is no high-income group in the case of the Boeng Salang slum settlement. It also points out that Bassac River is the poorest area in term of the population's income among the studied settlements where almost four fifths of its population are members of the low-income group.

⁴ In most of their studies, the authors conclude that migrants tend to be selective by age, education and marital status in that they are in a better category than the non-migrants or urban-born population.

Figure 4-4.3: Income Levels of the Studied Population

Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In terms of the relationship between type of migration and level of income, Table 4-4.5 reveals that, in general, the majority of the high-income group are Vietnamese immigrants. The Chi-square test results of the relationship between the population's type of migration and income level show the situation is different among the studied settlements. The tests reveal that there is no significant association between the two variables of the level of income and migration type of the population in the Boeng Kak squatter and Boeng Salang slum settlements ($p = 0.56$ and $p = 0.73 > 0.05$).

Table 4-4.5: Income Levels of the Studied Population by Migration Type

Migration Type	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
Rural-P. Penh	34 48.6	4 5.7	0 0	12 24.3	13 17.1	0 0	34 48.6	19 27.1	8 11.4	32 45.7	28 40.0	0 0
Other cities-P. Penh	4 5.7	2 2.9	0 0	4 5.7	0 0	0 0	7 10.0	2 2.9	0 0	6 8.6	4 5.7	0 0
Vietnamese immigrant	20 28.6	0 0	6 8.6	7 10.0	2 2.9	32 45.7	0 0	0 0	0 0	0 0	0 0	0 0
Total:	58 82.9	6 8.6	6 8.6	23 32.9	15 21.4	32 45.7	41 58.6	21 30.0	8 11.4	38 54.3	32 45.7	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 8.26$, $p = 0.02 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 24.84$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 4.82$, $p = 0.56$ - N.S.

Boeng Salang settlement: $\chi^2 = 0.61$, $p = 0.73$ - N. S.

In contrast, in the Bassac River and East Preah Monivong Bridge squatter settlements the test results show there is a significant association between the two variables of the level of income and migration type of the population ($p < 0.05$). In both cases, all high income population are the Vietnamese. This is because the majority of the Vietnamese immigrants work in the high-paid service industry, mainly in the bars and discotheques where the customers pay them in US dollars (Fieldwork: 1996-1997). This is especially true of the young, single and female Vietnamese immigrants.

In terms of the relationship between the status of migration and the level of income of the population, Table 4-4.6 reveals that, in general, the majority of the high-income group are new migrants. The Chi-square test results of the relationship between the population's status of migration and income level show there is a significant association between the two variables in all the studied settlements ($p < 0.05$). In the case of Bassac River squatter settlement all the high income population are new migrants although they also dominate among those who are low income.

Table 4-4.6: Income Levels of the Studied Population by Migration Status

Migration status	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
Long-term migrant	25 35.7	4 5.7	0 0	20 28.6	12 17.1	4 5.7	38 54.3	19 27.1	3 4.3	25 35.7	23 32.9	0 0
New migrant	33 47.1	2 2.9	6 8.6	3 4.3	3 4.3	28 40.0	3 4.3	2 2.9	5 7.1	13 18.6	9 12.9	0 0
Total:	58 82.9	6 8.6	6 8.6	23 32.9	15 21.4	32 45.7	41 58.6	21 30.0	8 11.4	38 54.3	32 45.7	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 9.51, p = 0.04 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 25.62, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 16.63, p = 0.002 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 11.63, p = 0.002 < 0.05$ - S.

Similarly, in the East Preah Monivong Bridge and Boeng Kak squatter settlements new migrants also dominate among those who have a high income compared with their long-term migrant counterparts. In the case of the Boeng Salang slum settlement, long-term migrants dominate among both of those who earn low and middle income compared with their new migrant. In general picture of the four studied settlements, new migrants dominate among those who earn high income compared with long-term migrants. This is mainly due to the fact that, as mentioned earlier,

although long-term migrants have the advantage over new migrants in obtaining work in the formal sector because they have more experience and a better understanding of the city, such formal employment are not necessarily better paid than work in the informal sector, as also found in other developing countries and noted by Mazumdar (1988), Kannappan (1985, 1988 and 1989), and Turnham (1993). In this case, new migrants are those young, single and female Vietnamese immigrants who work in the sex industry. Such work requires no experience and understanding of the city and easy to find; the only requirement is that the employees are young.

Finally, since the level of education of the Vietnamese immigrants is irrelevant to their earning capacity, this section concludes with a comparison only between the level of income and type of employment of the studied population. In terms of the relationship between the level of income and type of employment of the population, Table 4-4.7 reveals that, in general, the majority of the high-income group are employed in the informal sector of the city's economy, such as in bars and discotheques.

Table 4-4.7: Types of Employment of the Studied Population by their Income Levels

Employment type	Bassac River			East Preah Monivong			Boeng Kak			Boeng Salang		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
Informal worker	44 69.8	3 4.7	6 9.4	14 20.6	2 2.9	32 47.1	29 34.5	2 3.4	5 8.6	19 27.1	4 5.7	0 0
Formal worker	7 11.1	3 4.7	0 0	7 10.3	13 19.1	0 0	12 20.7	16 27.6	3 5.1	19 27.1	28 40.0	0 0
Total:	51 80.9	6 9.4	6 9.4	21 30.9	15 22.0	32 47.1	32 55.2	18 31.0	8 13.7	38 54.3	32 45.7	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 48.11, p = 0.001 < 0.05 - S.$

East Preah Monivong Bridge settlement: $\chi^2 = 89.26, p = 0.001 < 0.05 - S.$

Boeng Kak settlement: $\chi^2 = 46.46, p = 0.003 < 0.05 - S.$

Boeng Salang settlement: $\chi^2 = 37.50, p = 0.001 < 0.05 - S.$

The Chi-square test results of the relationship between the two variables of type of employment and income level show there is a significant association between the two variables in all the studied settlements ($p < 0.05$). In the cases of Bassac River, East Preah Monivong Bridge and Boeng Kak squatter settlements informal workers dominate among those who earn high income compared with their counterparts in the formal sector. This finding supports the view of many scholars such as Mazumdar (1988), Kannappan (1985, 1988 and 1989) and Turnham (1993) that the formal sector do not necessarily provide a higher income for its employees.

In contrast, in the case of the Boeng Salang slum settlement, the formal workers dominate among those who earn middle income compared with the informal workers. However, in general the situation differs among the studied settlements in regard to the three level of income. This is because of the diverse nature of the formal and informal employment of the population, which produces different income levels. In other words, some informal jobs result in higher levels of income than others and also could be higher than jobs in the formal sector.

For example, the food hawkers in Phnom Penh's streets earn less than a self-employed prostitute, while the latter earns more than the salaried civil servants in the formal sector. However, in the case of Boeng Salang slum settlement where the formal workers are better off than the informal workers is due to the fact that most informal workers are employed in the low income activities. These are garbage collectors, evening food hawkers rather than in the high paid informal jobs such as self-employed prostitute.

4-5 The Main Reasons for Migration to Phnom Penh City

In the literature review in the earlier chapters, the search for a better income is the main reason for migration to cities in most developing countries, especially for migrants from rural areas. The following examination and discussion aim to establish the main reasons for migration to Phnom Penh city of the interviewed population. It also focuses on the type and status of migration.

In general, Table 4-5.1 reveals that the majority of the studied population whose reason for migration is for a better income are Vietnamese immigrants. In fact, all the Vietnamese immigrants migrated to Phnom Penh for a better income. As there is no war in Vietnam, only economic reasons push them out of their country. In contrast, the majority of rural-Phnom Penh and other cities-Phnom Penh migrants moved to the city for reasons not related to the search for a better income in the city. However, most of these two types of migrants included the search for a better income as one of their reasons for migration, but they did not list it as the most important reason for migration when asked to do so (See Appendix II & III of the Questionnaires).

The Chi-square test results of the relationship between the reasons for migration to Phnom Penh and the population's migration type reveal that the situation differs among the studied settlements. It shows that there is no significant association between the two variables in the case of the Boeng Kak squatter settlement ($p = 0.14 > 0.05$). In contrast, in the Bassac River, East Preah Monivong Bridge squatter and Boeng Salang slum settlements, the tests show there is a significant association between the two variables of the reason for migration to Phnom Penh and the population's type of migration (all $p < 0.05$).

In both the Bassac River and East Preah Monivong Bridge settlements where there are Vietnamese, all of these immigrants migrated to Phnom Penh for a better income while most of their Cambodian counterparts, either from rural areas or other cities, migrated to Phnom Penh for other reasons. In the Boeng Kak and Boeng Salang settlements, where none of the Vietnamese immigrants are reported, the majority of rural-Phnom Penh and other cities-Phnom Penh migrants migrated to Phnom Penh for other reasons, as also was found in the previous two settlements. The main reason for this, as revealed in the next discussion, is the rather unique situation in Cambodia that occurred

after the collapse of the Khmer Rouge regime in 1979, when the mass population was allowed back into the cities.

Table 4-5.1: Reason for Migration to Phnom Penh of the Studied Population by Migration Type

Reason for migration	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Rural-P. Penh	Other cities-P. Penh	Vietnamese immigrant	Rural-P. Penh	Other cities-P. Penh	Vietnamese immigrant	Rural-P. Penh	Other cities-P. Penh	Vietnamese immigrant	Rural-P. Penh	Other cities-P. Penh	Vietnamese immigrant
For better income	10 14.3	3 4.3	26 37.1	0 0	0 0	41 58.6	17 24.2	3 4.3	0 0	20 28.6	0 0	0 0
Sub-total of other reasons, as follows:	28 40.0	3 4.3	0 0	25 35.7	4 5.7	0 0	44 62.8	6 8.6	0 0	40 71.4	10 14.3	0 0
Looking for govt. job/job transfer	4 5.7	2 2.9	0 0	8 11.4	4 5.7	0 0	6 8.6	2 2.9	0 0	3 4.3	0 0	0 0
Wanted to settle down in city for no specific reason	8 11.4	0 0	0 0	6 8.6	0 0	0 0	8 11.4	0 0	0 0	1 1.4	0 0	0 0
Followed parents/family to the city	7 10.0	1 1.4	0 0	7 10.0	0 0	0 0	24 34.2	3 4.3	0 0	4 5.7	0 0	0 0
To get better education	0 0	0 0	0 0	1 1.4	0 0	0 0	2 2.9	0 0	0 0	6 8.6	0 0	0 0
Escaped from rural insecurity	0 0	0 0	0 0	3 4.3	0 0	0 0	1 1.4	1 1.4	0 0	22 31.4	10 14.3	0 0
Escaped drought and flood	9 12.9	0 0	0 0	0 0	0 0	0 0	3 4.3	0 0	0 0	4 5.7	0 0	0 0
Total	38 54.3	6 8.6	26 37.1	25 35.7	4 5.7	41 58.6	61 87.1	9 12.9	0 0	60 85.7	10 14.3	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 70.22, p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 168.23, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 41.51, p = 0.14$ - N. S.

Boeng Salang settlement: $\chi^2 = 44.89, p = 0.001 < 0.05$ - S.

In general, Table 4-5.2 reveals that the majority of the studied population whose reason for migration is a better income are new migrants. The Chi-square tests in Table 4-5.2 also reveal that there is a significant association between the variable of migration status and that of the reasons for migration to Phnom Penh of the studied population in all the studied squatter and slum settlements (all $p < 0.05$). In the Bassac River, the majority of both long-term and new migrants came to the city for better income. In the East Preah Monivong Bridge, Boeng Kak squatter and Boeng Salang slum settlements the majority of new migrants migrated to Phnom Penh for a better income while the majority of long-term migrants migrated for other reasons less relevant to the search for a better income.

According to the above finding the majority of these new migrants are also the Vietnamese immigrants. They migrated to Phnom Penh to take advantage of the arrival of the multi-national, Western civilian and military personnel who worked in Cambodia during the run-up to the national election in late 1991-1993. These young Vietnamese females mostly found work in the sex industry and related fields, such as prostitutes, massagers, and employees in discotheques and hostesses in bars. In contrast, the majority of those who migrated to Phnom Penh for other reasons are long-term migrants. As mentioned earlier, most of them came to the city between 1979 to 1985, when the city was being rehabilitated after standing nearly empty for four years under the Khmer Rouge regime.

Table 4-5.2: Reason for Migration to Phnom Penh of the Studied Population by Migration Status

Reason for migration	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Long-term migrant	New migrant	Long-term migrant	New migrant	Long-term migrant	New migrant	Long-term migrant	New migrant
For better income	15 21.4	24 34.3	12 17.1	29 41.4	13 18.6	7 10.0	8 11.4	12 17.1
Sub-total of other reasons, as follows:	14 20.0	17 24.3	24 34.3	5 7.1	47 67.1	3 4.3	40 57.1	10 14.3
Looking for govt. job/job transfer	1 1.4	5 7.1	9 12.9	3 4.3	7 10.0	1 1.4	3 4.3	0 0
Wanted to settle down in city for no specific reason	8 11.4	0 0	4 5.7	2 2.9	8 11.4	0 0	0 0	1 1.4
Followed parents/family to city	1 1.4	7 10.0	7 10.0	0 0	26 37.2	1 1.4	4 5.7	0 0
To get better education	0 0	0 0	1 1.4	0 0	2 2.9	0 0	0 0	6 8.6
Escaped from rural insecurity	0 0	0 0	3 4.3	0 0	2 2.9	0 0	29 41.4	3 4.3
Escaped drought and flood	4 5.7	5 7.1	0 0	0 0	2 2.9	1 1.4	4 5.7	0 0
Total	29 41.4	41 58.6	36 51.4	34 48.6	60 85.7	10 14.3	48 68.6	22 31.4

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 24.72, p = 0.03 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 46.15, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 60.49, p = 0.001 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 59.53, p = 0.001 < 0.05$ - S.

This group included the author and his family, who came to Phnom Penh not with the purpose of seeking a better income, but as the survivors of the most horrid regime known in human history. At the time, there were many reasons for coming to the centre of the country's population and its government - such as Phnom Penh was. These include escaping the horrors that took place during the Khmer Rouge regime; many people wanted to run away from the Khmer Rouge local leaders and cadres who continued to live in rural areas. Others tried to locate relatives and friends they had

not heard from since the Khmer Rouge came to power in 1975. There were countless other reasons for moving to Phnom Penh that relate to surviving a genocide but not to economic factors.

For some people, such as Mr. Koy Setha¹ (one of the studied sample interviewees in the Ampil area of the East Preah Monivong Bridge squatter settlement), the reason for ending up in Phnom Penh was not his main reason for migration from his rural village in the Steng Treng province. He said he did not come to the city to settle down but to search for his three sons, who had volunteered to work in the factories in Phnom Penh during the Khmer Rouge regime. However, after failing to find his sons in Phnom Penh (at the time of the interview Mr. Setha had still not heard any news of them) he and his wife felt no need to return to their village. His decision to remain in the city was also due to his determination to keep the hope alive that news of his sons' whereabouts will reach him one day. In short, the main reasons for migration to Phnom Penh of the long-term migrants are family-related rather than the search for a better income due to the unique situation faced by the Cambodian population during the Khmer Rouge regime.

In general, Table 4-5.3 reveals that the majority of the studied population whose reason for migration is for a better income are female. Comparing all the women of the studied population, the majority of them also migrated to Phnom Penh for a better income. The majority of these female migrants are also new migrants, as shown above, including the young Vietnamese and Cambodian women who mainly work in the sex industry and related industries. In contrast, the majority of male migrants migrated to the city for other reasons that are not related to the search for a better income in the city. As explained earlier, most of these male migrants came to the city after the collapse of the Khmer Rouge regime and during the time when there was no private business in the country and in Phnom Penh in particular². However, there was not much point in migrating to the city and spending so much money on getting there when they could not get a better-paid job in the government. This is because at that time government jobs were - and are today - inadequately paid.

The Chi-square test results of the relationship between the reasons for migration to Phnom Penh and the gender structure of the population in Table 4-5.3 also reveal that the situation differs among

¹ There are 54 interviewees that were conducted by the author during the fieldwork from September 1996 to February 1997. The author conducted most interviews after the questionnaires were completed. In many cases, these took the form of a friendly talk rather than an interview.

² Private business was not allowed in Cambodia from 1979 to 1989 during the Vietnamese occupation or invasion.

the studied settlements. The tests reveal that there is no significant association between the two variables in the case of the Bassac River squatter settlement ($p = 0.06 > 0.05$).

Table 4-5.3: Reason for Migration to Phnom Penh of the Studied Population by Gender Structure

Reason for migration	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Male	Female	Male	Female	Male	Female	Male	Female
For better income	17 24.3	22 31.4	8 11.4	33 47.1	8 11.4	12 17.1	0 0	20 28.6
Sub-total of other reasons, as follows:	15 21.4	16 22.9	25 35.7	4 5.7	24 35.7	26 35.7	40 57.1	10 14.3
Looking for govt. job/job transfer	3 4.3	3 4.3	12 17.1	0 0	7 10.0	1 1.4	3 4.3	0 0
Wanted to settle down in city for no specific reason	1 1.4	7 10.0	2 2.9	4 5.7	1 1.4	7 10.0	0 0	1 1.4
Followed parents/family to city	4 5.7	4 5.7	10 14.3	0 0	12 17.1	15 21.4	0 0	4 5.7
To get better education	0 0	0 0	1 1.4	0 0	0 0	2 2.9	5 7.1	1 1.4
Escaped from rural insecurity	0 0	0 0	0 0	0 0	2 2.9	0 0	32 45.7	0 0
Escaped drought and flood	7 10.0	2 2.9	0 0	0 0	2 2.9	1 1.4	0 0	4 5.7
Total	32 45.7	38 54.3	33 47.1	37 52.9	32 45.7	38 54.3	40 57.1	30 42.9

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 13.70, p = 0.060 > 0.05$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 38.80, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 19.77, p = 0.048 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 66.59, p = 0.001 < 0.05$ - S.

In contrast, in the cases of the East Preah Monivong Bridge, Boeng Kak squatter and Boeng Salang slum settlements, the tests show there is a significant association between the two variables of the reasons for migration to Phnom Penh and the gender structure of the population (all $p < 0.05$). In general of all these three settlements the majority of female migrants migrated to Phnom Penh for a better income, while the majority of their male counterparts migrated to Phnom Penh for other reasons that are not related to the search for a better income in the city.

Table 4-5.4 reveals that although the situation varies among the studied settlements, the majority of the studied population – regardless of reason for migration - had a relative/friend in the city before migration. However, the Chi-square test results between the reasons for migration and the help and information provided by such a relative/friend reveals that in only one case is there a significant association, that of the Boeng Kak settlement ($p = 0.001 < 0.05$).

Table 4-5.4: Reason for the Studied Population's Migration to Phnom Penh by their Connections with a Relative/Friend in the City

Reason for migration	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Had no relativ e/fri.	Had relativ e/fri.	Receiv ed help/in form.	Had no relativ e/fri.	Had relativ e/fri.	Receiv ed help/in form.	Had no relativ e/fri.	Had relativ e/fri.	Receiv ed help/in form.	Had no relativ e/fri.	Had relativ e/fri.	Receiv ed help/in form.
For better income	6	33	32	4	40	40	7	15	14	0	20	20
	8.6	47.1	45.7	5.7	57.1	57.1	10.0	21.4	20.0	0	28.6	28.6
Sub-total of other reasons, as follows:	12	19	16	15	11	11	20	28	19	25	25	25
	17.1	27.1	22.9	21.4	15.7	15.7	28.6	40.0	27.1	35.7	35.7	35.7
Looking for govt. job/job transfer	2	4	4	5	7	7	3	5	5	3	0	1
	2.9	5.7	5.7	7.1	10.0	10.0	4.3	7.1	7.1	4.3	0	1.4
Wanted to settle down in city for no specific reason	3	5	4	3	3	3	3	5	4	0	1	4
	4.3	7.1	5.7	4.3	4.3	4.3	4.3	7.1	5.7	0	1.4	5.7
Followed parents/family to city	3	5	3	7	0	0	11	16	8	0	4	0
	4.3	7.1	4.3	10.0	0	0	15.7	22.9	11.4	0	5.7	0
To get better education	0	0	0	0	1	1	1	1	1	0	6	6
	0	0	0	0	1.4	1.4	1.4	1.4	1.4	0	8.6	8.6
Escaped from rural insecurity	0	0	0	0	0	0	0	0	0	22	10	10
	0	0	0	0	0	0	0	0	0	31.4	14.3	14.3
Escaped drought and flood	4	5	5	0	0	0	2	1	1	0	4	14
	5.7	7.1	7.1	0	0	0	2.9	1.4	1.4	0	5.7	20.0
Total:	18	52	48	19	51	51	27	43	33	25	45	45
	25.7	74.3	68.6	27.1	72.9	72.9	38.6	61.4	47.1	35.7	64.3	64.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test between the reasons for migration and receiving information/help is presented as follows:

Bassac River: $\chi^2 = 11.62, p = 0.114 > 0.05$ -N.S.

East Pr. Monivong Bridge: $\chi^2 = 26.73, p = 0.001 < 0.05$ -S.

Boeng Kak: $\chi^2 = 9.80, p = 0.55 > 0.05$ -N.S.

Boeng Salang: $\chi^2 = 8.62, p = 0.13 > 0.05$ -N.S.

In Boeng Kak settlement those who had a relative or friend in the city before their migration (15 out of 43 respondents) mostly migrated for a better income compared with those who had no relative or friend in the city (7 out of 27 respondents). It can be argued that those who had relatives or friends in the city before their migration were encouraged to migrate to the city through being promised that they would be better off compared with remaining in the place of origin. However, it is clear that in general, the reasons for migration to Phnom Penh of the studied population have no association with their connections with friends/relatives in the city before their migration. This is mainly due to the fact that, except in the case of the Vietnamese immigrants, the majority of the Cambodian migrants came to Phnom Penh before 1990, when the city did not provided better jobs for the migrants, as explained earlier. Thus, having a relative or friend in the city before migration or not seem irrelevant to the decision to migrate to the city for either better income or other reasons. In contrast, although the test results show no statistical significance, in reality, to find a better job in the new places the Vietnamese immigrants need to have connections with the new places. This is because without it, it is difficult for them to secure not only a better job, but also to find any job.

4-6 Summary:

The findings of this Chapter reveal that, in general, the studied squatter settlements in Phnom Penh face similar conditions of inadequate services and infrastructure as those of other cities in developing countries. The squatter population is solely responsible for their services without help from government authorities. In general, as shown in Table 4-6.1, among the three studied squatter settlements, Boeng Kak is the most developed area. The table also shows that geographical location has a great impact on the physical characteristics of squatter houses. In other words, squatter housing conditions tend to improve as the houses' location moves further away from the river or lake. For example, in the East Preah Monivong Bridge settlement the houses in a poorer condition are situated close to the river and the houseboats, while the houses in a better condition are located inland.

Table 4-6.1: Summary of the Characteristics of the Squatter Shelters

Name of the settlement	Average size of the house	Roof	Wall	Floor	Re-enforcement
Bassac River	1. Around 20 sq. m.	Palm tree leaves, thatch	Palm tree leaves, thatch, wood, bamboo	Earth, bamboo	Wood, bamboo
	2. 20-50 sq. m.	Thatch, corrugated iron or cement sheets, tiles	Palm tree leaves, thatch, wood, bamboo	Tiles, bamboo, wood, cement	Wood, bamboo, concrete, brick
East P. M. Bridge	1. Around 20 sq. m.	Palm tree leaves, thatch	Palm tree leaves, thatch, wood, bamboo	Earth, bamboo	Wood, bamboo
	2. More than 20 sq. m. to 200 sq. m.	Thatch, corrugated iron or cement sheets, tiles	Thatch, wood, bamboo, wood, brick with plaster, cement	Tiles, bamboo, wood, cement	Wood, bamboo, concrete, brick
	3. Boats' size	Palm tree leaves, thatch	Bamboo, palm tree leaves, thatch	Wood, bamboo	Wood, bamboo
Boeng Kak	1. around 20 sq. m.	thatch	thatch, wood, bamboo	wood, bamboo	Wood, bamboo
	2. More than 20 sq. m. and up to more than 500 sq. m.	Thatch, corrugated iron or cement sheets, tiles	Wood, brick with plaster, cement	Tiles, bamboo, wood, cement	Wood, bamboo, concrete, brick

Source: Fieldwork: 1996-1997

Note: 1- The areas close to the riverbank or the lake

2- The areas far from the river or lake

3- Boats and related settlements

Similarly, the houses in the Bassac River area can be divided into the same two types as in East Preah Monivong Bridge. Geographical location seems to be the most important factor influencing

housing condition. In the case of the Boeng Kak settlement the housing conditions in the settlement improve dramatically along with the distance from the lake. This finding denounces many scholars' perception that land tenure is the key factor in squatter housing conditions. Shortly, this is because, as discussed in Chapter 1, the lack of housing and land regulations and the rampant corruption within the government bureaucracy are the main reasons for the continuation and the flourishing of the squatter settlements, rather than land tenure.

According to the summary in Table 4-6.2, the Boeng Kak settlement's physical characteristics of housing, services and infrastructure are better when compared with the other two studied areas. Its location is also better than the Bassac river settlement in terms of land prices and access to public services, while the East Preah Monivong Bridge area has the worst location. The table also reveals that between the studied squatter settlements and the poor non-squatter settlement there is not much difference in terms of the physical characteristics of housing and access to public services as well as the living conditions in the areas. Although some facilities, such as schools and hospitals, are generally not available in squatter settlements, squatters still have access to these services within a tolerable distance from the area.

Table 4-6.2: A Comparison of The Populations' Access to Services

Name of the settlement	The percentage of the population with access to:			
	water supply	electricity	sewage system	waste collection
Bassac River	0.0	64.3	48.6	2.9
East P.M. Bridge	0.0	54.3	90.0	22.9
Boeng Kak	45.7	95.7	47.1	47.1
Boeng Salang	68.6	87.1	85.7	85.7
Phnom Penh	40.0	80.0	65.0	95.0

Sources: Compiled from this chapter.

When such facilities are available in the poor, non-squatter settlements it is normally inadequate and expensive. Thus, the majority of the slum population still faces as many difficulties as their squatter counterparts. In addition, squatter housing in the case of Phnom Penh city is materially better than in other cities of developing countries since no house is made of inferior materials, as found in other cases of developing countries (See Chapter 2). This is mainly because, firstly, the majority of housing materials - especially bamboo shoots, woods, thatch etc – abounds in the forests and is cheaper than in cities of other developing countries. Secondly, the majority of squatters (as will be shown in the Chapter 6) are not the poor or poorest group even compared with the slum population of the city. In short, both the residents in squatter settlements and members of the poor,

non-squatter community have their own, unique advantages and disadvantages, but their living conditions are similar. The significant difference is the land tenure of their properties.

The findings also reveal that in general, the entire population of the studied squatter settlements - whether rich or poor - seem to have similar accesses to services and infrastructure in the areas. This is because the Chi-square test results between the levels of income of the population and the access to services shows no significant association between the two variables. However, such access seems to depend on the location of the settlements. In other words, the squatter population's access to services have no relationship with their level of income, but seems to depend on the geographical location of the settlements. The situation does, of course, differ among the three studied settlements where the Chi-square tests produce different results, but in general the majority of the population seem to have similar access to the services of each area.

There is no clear evidence¹ of links between political parties and squatting apart from some rumours from which no conclusion can be drawn. The researcher suggests that further investigation and study are needed for a credible conclusion on this issue. It is noticed that squatters and opportunists increase their activities during the transitional periods in the country, when most squatter settlements of the city were established (according to the informal interviews with various government officials and the author's own observation during three years working in the field).

It is not found, as in the case in cities of other countries, that land owners initiate, organise or encourage squatting on their land so they can claim compensation from government authorities or obtain services and infrastructure on their land to eventually increase the land prices (See Chapter 2). According to the information gathered during the field survey in the studied squatter settlements, there is no illegal land subdivision because all land in the studied location was illegally occupied. This is because, as mentioned in Chapter 2 and similar to other developing countries' case, in the case of illegal subdivision landowners divide their own land (which they own legally) without permission from the authorities and sell the plots off to others². In the case of rooftop squatter settlements, the top terraces are normally legally occupied by squatters but the

¹ However, there were two occasions when squatters were promised protection. First, in 1993, the king appealed to the municipal government not to evict them. Second, in 1996, the then second prime minister Hun Sen did the same and even encouraged squatters to ask for compensation of thousands of US dollars.

² Source: Obtained from the informal interviews with experienced professionals and the researcher's own observation.

constructions are illegal (without building permission from authorities the constructions are technically unsafe etc.).

In the theoretical literature review of Chapter 3, migration is divided into 7 types: rural to urban, urban to urban, urban-rural, rural-rural, within the city or intra-city, immigration and returnees. The findings from this study in Section 4-3, however, indicate that there are only 3 types of migration that are clearly distinguishable and relevant to this study: rural to Phnom Penh, other cities to Phnom Penh migration and immigration. Nevertheless, within Phnom Penh migrants and returnees are included in the above three types of migration, as explained earlier in this chapter.

Shortly, this is because migration within Phnom Penh city was one of the last, if not the last move of the studied population at the time of the interview. Also, the city was evacuated during the period 1975 to 1979. Hence, the entire population of Phnom Penh (except for the young people aged under 17 years) were migrants. Therefore, migrants within Phnom Penh city are those who lived in other parts of Phnom Penh after their arrival from rural areas, other cities or foreign countries before moving to the studied settlements.

Moreover, the returnees are also included in rural to Phnom Penh and other cities to Phnom Penh migrants. While they were born in Phnom Penh and had lived there for years, they were forced to leave the city during the period 1975-1979. Only from the 1980s did the native-born return to the city. They are classified as either rural to Phnom Penh (returnee) migrants or other cities to Phnom Penh (returnee) migrants, depending on where they lived before migration to Phnom Penh and the studied settlements. Therefore, these two migration types (within the city and returnees) cannot be clearly distinguished from the other three types of migration in the case of Phnom Penh.

In terms of the migration types, among the total of 280 interviewees (100 per cent) of the studied settlements, rural to Phnom Penh migrants (184 respondents, or 65.7 per cent) dominate in all three migration types, as mentioned above. Rural to Phnom Penh migrants is also the majority in the Bassac River, Boeng Kak and Boeng Salang settlements. In contrast, the majority of East Preah Monivong Bridge migrants are Vietnamese immigrants. The second largest group among the total interviewees is the Vietnamese immigrants, who account for 67 respondents (23.9 per cent) and are

found only in two squatter settlements: Bassac River, which has 26, and East Preah Monivong Bridge, which has 41.

There are only 29 (10.3 percent) migrants from other cities to Phnom Penh in all the studied settlements, comprising 6 in Bassac River, 4 in East Preah Monivong Bridge, 9 in Boeng Kak and 10 in Boeng Slang. Thus, this finding is generally similar to that of other scholars, as discussed in Chapter 2, where the majority of squatters are rural-urban migrants. However, the difference is that some migration types are indistinguishable in Phnom Penh due to the holocaust that took place between 1975 and 1979. In other words, nearly the entire population of the city are migrants from after 1979.

In terms of migration status, there are 173 (61.7 per cent) long-term migrants and 107 new migrants (38.3 percent) in the studied areas. Long-term migrants are the majority of the population of East Preah Monivong Bridge (36 out of 70), Boeng Kak (60 out of 70) and Boeng Salang (48 out of 70), while the majority (41 out of 70) of the Bassac River population are new migrants. The finding therefore contradicts that found in other countries, as mentioned in Chapter 2, where new migrants dominate the squatter population. This indicates that squatting is not a by-product of new migration. There is little difference in the gender structures of the studied populations of the settlements, where female slightly dominates male (143 versus 137).

This gender structure reflects that of the city's population as a whole, where female also slightly dominates male (50.9 per cent versus 49.1 per cent). The gender ratio of each type and status of migration varies from settlement to settlement. However, generally, the majority of rural-Phnom Penh (94 versus 90) and other cities-Phnom Penh (25 versus 5) migrants are male, while the majority of Vietnamese immigrants (48 versus 19) are female. In addition, the majority of long-term migrants are male in contrast to the new migrants, who are mostly female.

In all the studied settlements, middle-aged (26 to 35 years) interviewees are the dominant group among the sample population. Again, the number or percentage of respondents in each age group differs in terms of type and status of migration. In general, the largest age group of rural-Phnom Penh (81 out of 184) and other cities-Phnom Penh (13 out of 29) migrants is the one between 36 and 49 years. The majority of Vietnamese immigrants are aged between 16 and 25 years. In

addition, the biggest age group of long-term migrants (75 out of 173) is that between the ages of 36 and 49 years, while in the case of new migrants (44 out of 107) it is between 16 and 25 years. This is because the majority of new migrants are new, young, female Vietnamese migrants who move to the city alone for job opportunities.

In terms of marital status, married interviewees in all studied settlements dominate the population. Generally, the majority of rural-Phnom Penh (138 out of 184) and other cities-Phnom Penh (27 out of 29) migrants are married, while most of the Vietnamese immigrants (32 out of 67) are single. Moreover, the majority of long-term (137 out of 170) and new migrants (57 out of 120) are married. Again, almost all the young Vietnamese immigrants are single.

Section 4-3 reveals that the majority³ of the interviewed population of all settlements have a secondary to high school education. Although illiterate interviewees are found in the Bassac River and Boeng Kak squatter settlements, their numbers are low as only 3 interviewees are found in each settlement. The number of interviewees with either a primary or university education varies from one settlement to another, but there are more with a primary education than with a university education in all settlements, except in East Preah Monivong Bridge.

The majority of both rural-Phnom Penh (127 out of 184) and other cities-Phnom Penh (18 out of 29) migrants have a secondary education. Similarly, the majority of both long-term (112 out of 155) and new (34 out of 59) migrants also have a secondary education. The Chi-square test results of the relationship between the educational attainments of the population and their migration type produce a significant association between the two variables. It is noticed that other-cities-Phnom Penh migrants tend to be better educated than their rural-Phnom Penh counterparts. This is not surprising since normally in Cambodia, educational institutions are poorer in rural areas compared with the urban ones.

The findings also reveal that the majority of the interviewed population in the Bassac River and East Preah Monivong Bridge squatter settlements are employed in the informal sector of the city's economy, while the majority of the population of the Boeng Kak squatter and Boeng Salang slum

³ As mentioned in section 6.4, only Cambodian (by birth) migrants are asked about their education, since it is irrelevant in the case of the Vietnamese immigrants due to their ability of earning a living in Cambodia.

settlements are employed in the formal sector. In general, the majority of both other cities-Phnom Penh migrants (15 out of 28) and Vietnamese immigrants (66 out of 67) are employed in the informal sector, while the majority of rural-Phnom Penh migrants (92 out of 164) are employed in the formal sector. In addition, almost all of the unemployed respondents are rural-Phnom Penh migrants (20 out of 21) and the majority of the unemployed respondents are long-term migrants.

Furthermore, the majority of long-term migrants are employed in the formal sector, while the majority of new migrants are employed in the informal sector. The Chi-square test results of the relationship between the population's migration type and status and job status produce a significant association between the two variables. Thus, type and status of migration impact on the population's type of employment (as presented in Box-2). In other words, new rural-Phnom Penh migrants seem to have less of a chance to find work in the formal sector than their long-term, other cities-Phnom Penh counterparts.

In terms of level of income, the majority of the populations of all the studied settlements are low-income households. This is overwhelmingly true of the interviewed population of the Bassac River squatter settlement, where up to 58 respondents (82.9 per cent) have a low income. The population with the fewest low-income households is in the East Preah Monivong Bridge squatter settlement, where only 23 respondents (32.9 per cent) were recorded. Moreover, in this settlement the number of high-income households is higher than the number of households with a middle income, while in the other two squatter settlements the numbers of these two groups are almost similar. However, none of the high-income households are found in the studied slum settlement.

The majority of rural-Phnom Penh (112 out of 184) and other cities-Phnom Penh (15 out of 23) migrants are in the low-income group, while the majority of Vietnamese immigrants (38 out of 67) are in the high-income group. Moreover, the majority of long-term migrants (108 out of 173) are low-income households, while the majority of new migrants (55 out of 107) have a higher income (middle and high). The Chi-square test results between the level of income of the population and migration type and status produce a significant association between the two variables. Thus, type and status of migration impact on the level of income of the population.

It is indeed a one of the important findings that the income of the interviewed households of the Boeng Salang slum settlement is lower than that in the two squatter settlements of East Preah

Monivong Bridge and Boeng Kak. The Chi-square test results between the level of income of the population and type of job produce a significant association between the two variables that leads to the finding that formal workers do not necessarily earn more than informal workers. This proves that the hypothesis stating that people who work in the informal sector of the economy earn less than those who work in the formal sector failed in Phnom Penh city's case study. This is because, as discussed above, the majority of the total population of the two areas are employed in the informal sectors while the majority of the population of the Boeng Salang slum settlement are employed in the formal sector.

Section 4-5 shows that the main reason for migration to Phnom Penh varies from one settlement to another. However, two main reasons can be distinguished. These are the search for a better income in Phnom Penh with 120 respondents (42.8 per cent), while the remaining 160 respondents (67.2 per cent) came for other reasons. This provides evidence that the majority of Cambodian migrants (both rural-Phnom Penh and those from other cities-Phnom Penh) came to the city for other reasons (as presented in Box-2), while the majority of Vietnamese immigrants wanted a better income (as presented in Box-1). Moreover, the majority of long-term migrants came to the city for other reasons, while the majority of new migrants came for a better income.

The Chi-square test results of the relationship between the population's migration type and status and gender structure, and the access to services produce a significant association between the variables. Thus, type and status of migration and gender structure impact on the decision to migrate to Phnom Penh. In short, the findings of this section is rather different from that of other scholars in developing countries where, as mentioned in Chapter 2, the main reason for migration to cities is for a better income. This is normally the reason provided by more than half of the migrant population. In this case, however, that is the reason why all of the Vietnamese immigrants came to Phnom Penh.

Box-2: The differences between the interviewees' migration type and status, and job opportunities in the city and the migration situation.**1- The case of Mr. Thach Sok:**

Mr. Thach was married with two children at the time of the interview in January 1997. He was 38 years old at the time. He was born in the central town of Steang Treang province in Cambodia. He migrated to Phnom Penh in 1993, shortly before the national election. According to him his reason for migration was mainly the insecurity he experienced in his place of origin. He finished high school and worked as a district clerk before his migration. Mr. Thach came to the city alone at first because he could not afford to bring his wife and three daughters with him. He had relatives living in the city to whom he had paid many visits before his migration. With help and information from his relatives he had found a job as a construction worker at a private company within two weeks of his arrival in the city. During the job-hunting period he was offered free accommodation with relatives.

However, Mr. Thach said he contributed a small amount of money for his daily meal to his relatives, even though they declined it. One month later he brought his family from the province to live in a rented house in the Bassac River squatter settlement, where they remained. Mr. Thach concluded that as a new-comer from a rural area, it was difficult to find a job in the stable institutions (formal sector). This is because, according to him, firstly, most private and public companies do not have a high regard for the work experience of people from the countryside. Secondly, although he had relatives to help him find a job, he insisted that it would have been easier if he had been in the city for longer than he actually has.

2- The case of Mr. Kouy Sok:

Mr. Kouy was 59 years old and married with 9 children, 6 of whom lived with him at the time of the interview in December 1996. He was born in a village of Kampong Cham province of Cambodia. He migrated to Phnom Penh in 1982 with his whole family. His reason for migration was that he wanted to live in the city after the Khmer Rouge regime. Before the migration, between 1979 and 1981, he was a secondary teacher at the provincial school.

Mr. Kouy did not have any relatives or friends in the city before his migration. What information he had was what he had obtained through word of mouth: that in Phnom Penh the then government accepted anyone whom could work in administration. Upon his arrival in the city he was immediately offered a job as a schoolteacher. He received a house near his school in the Resey Keo district of Phnom Penh, as well as subsidised food and materials from the then government. He has worked as a teacher since then. However, due to a personal reason the house was sold and he has since squatted⁴ his current plot and built his own house in the East Preah Monivong Bridge squatter settlement. Mr. Kouy concluded that he did not have any problem in finding a job, as mentioned earlier, and neither had he had any problem in finding a house in the city at that time.

⁴ The word "squat" used here is not the direct word that was used by Mr. Kouy. He used the term "settle on vacant and no-man's land" during the interview. However, as mentioned in an earlier chapter, this term means squatting.

Chapter Five : The Process of Migration into Phnom Penh, The Situation of Movement into the Studied Settlements, The Process of Becoming Squatters and Slum Settlers, The Main Reasons For Squatting or Living in the Squatter Settlements, The Main Reasons for Planning to or not Planning to Squat of the Studied Population

Introduction:

This chapter aims to examine and discuss the situation of movement into the studied settlements, the process of becoming squatters and slum settlers, the main reasons for squatting or living in the squatter settlements, and the reasons for planning to or not planning to squat of the studied slum settlement. Some of these issues have been included in Chapter 6, but the remainder will be entirely tested in this chapter. The chapter therefore provides - and completes - the examination of the four main hypotheses of this study, comprising the relationship between job, income, type and status of migration, and the reason for squatting or, for those who buy, rent, received or look after properties, the reasons for living in squatter settlements.

This chapter has 6 sections. Section 5.1 provides the discussion on and examination of the process and situation of movement into the studied settlements of the studied population in relation to their type and status of migration. Section 5.2 deals with how the studied population obtained property in the studied settlements in relation to job, income, type and status of migration. It provides the examination of how the studied population became squatters and slum settlers. Section 5.3 examines the main reasons for squatting in relation to job, income, type and status of migration. Section 5.4 is focused on the studied slum population. It discusses the main reasons for planning to squat and planned methods of squatting of that part of the studied population who want to squat, in relation to job, income, type and status of migration. It also provides the reasons for not planning to squat of that part of the same slum settlement population who do not want to squat. This chapter ends with Section 5.5, which provides summaries of the findings in all the studied settlements.

5-1 The Process of Migration Into Phnom Penh

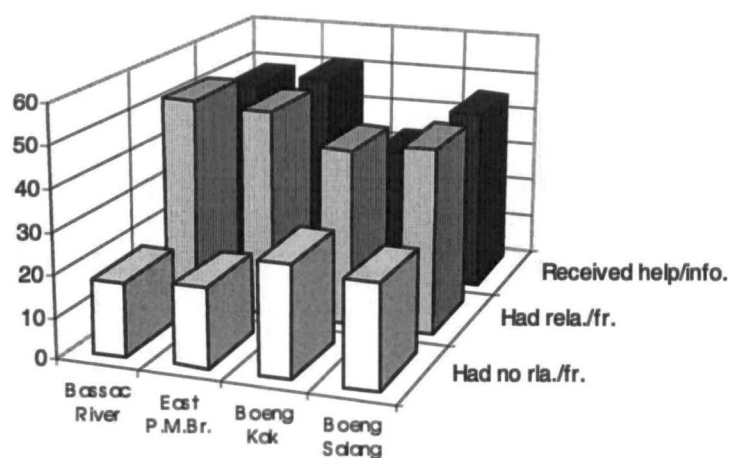
It is well known that in most developing countries migrants move to cities in many stages and often with considerable help from pioneering migrants from the same place of origin. However, section 4-2 of the previous chapter shows that the majority of migrants came directly to Phnom Penh

without stopping in other places and have lived in the studied settlements since they arrived in the city. It is noted in literature on the subject that squatter settlements of developing countries are often the places where rural people from the same villages, towns and even tribes converge. This is because, as mentioned earlier, the first migrants in the cities help clear the way for friends or relatives from their places of origin to move firstly to the city and, secondly, to the same settlement.

In this part of the paper, these issues are examined from settlement to settlement. The three main questions this examination aims to answer are whether migrants first moved to the city alone or with the whole family, whether they had relatives or friends in the city before they migrated, and, if they did have, whether they received information or help from them before and during migration.

- Migrants and Urban Connections:

Figure 5-1.1: Help and Information Received from Relatives or Friends before and during Migration to Phnom Penh of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

According to Figure 5-1.1, in general, the majority of the studied population had relatives or friends in the city before their move. It also shows that the majority of those who had relatives or friends in the city before their migration also received help and information from them. In relation to the studied population's type of migration, Table 5-1.1 reveals that in general, the majority of rural-Phnom Penh migrants and almost all of the Vietnamese immigrants had relatives or friends in the city before their migration. In contrast, the majority of other cities-Phnom Penh migrants did not have relatives or friends in the city before their migration. It is not difficult to explain the finding

that almost all the Vietnamese immigrants had connections with relatives or friends in the city before their migration, since they are foreigners.

In the case of rural-Phnom Penh migrants, although they have advantages over the Vietnamese immigrants, this group possesses little knowledge of the often rough and expensive urban lifestyle, such as where to live and eat. In the case of other cities-Phnom Penh migrants, this group has experience of living in urban areas and generally had visit Phnom Penh before, since the communication links between urban areas are much better than those between urban and rural areas in Cambodia.

Table 5-1.1: Number of the Studied Population Who Received Information or Help before Moving to the City by Migration Type

Migration type	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.
Rural-P. Penh migrant	16 22.9	22 31.4	18 25.7	18 25.7	7 10.0	7 10.0	24 34.2	37 52.9	27 38.6	15 21.4	45 64.3	45 64.3
Other cities-P. Penh migrant	2 2.9	4 5.7	4 5.7	0 0	4 5.7	4 5.7	3 4.3	6 8.6	6 8.6	10 14.3	0 0	0 0
Vietnamese immigrant	0 0	26 37.1	26 37.1	1 1.4	40 57.1	40 57.1	0 0	0 0	0 0	0 0	0 0	0 0
Total	18 25.7	52 74.3	48 68.6	19 27.1	51 72.9	51 72.9	27 38.6	43 61.4	33 47.1	25 35.7	45 64.3	45 64.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 20.42, p = 0.001 < 0.05$ -S.

East Pr. Monivong Bridge: $\chi^2 = 31.47, p = 0.001 < 0.05$ -S.

Boeng Kak: $\chi^2 = 1.19, p = 0.75 > 0.05$ -N.S.

Boeng Salang: $\chi^2 = 31.64, p = 0.001 < 0.05$ -S.

The Chi-square test results in Table 5-1.1 reveal that there is no significant association between the studied population's migration type and the help or information provided by relatives or friends in the city in the case of the Boeng Kak settlement ($p = 0.75 > 0.05$). However, the test results show there is a significant association between the two variables in the Bassac River, East Preah Monivong Bridge squatter and Boeng Salang slum settlements (all $p < 0.05$). In the case of the Bassac River and East Preah Monivong Bridge settlements, more Vietnamese immigrants had relatives or friends and received help and information from them before and during their migration to Phnom Penh compared with rural-Phnom Penh and other cities-Phnom Penh migrants. In the case of the Boeng Salang slum settlement, the rural-Phnom Penh migrants had relatives or friends and received help and information from them before and during their migration to the city. In short words, the Vietnamese immigrants and rural-Phnom Penh migrants of the studied population better

prepared before their migration to the city compared with other cities-Phnom Penh migrants, as explained above.

In relation to the studied population status of migration, Table 5-1.2 reveals that, in general, the majority of long-term and new migrants had relatives or friends in the city before their migration. However, the situation differs from one settlement to another. The majority of those who had relatives or friends also received help and information from them before and during their migration to the city. The Chi-square test results in Table 5-1.2 also reveal that there is no significant association between the studied population's migration status and whether they received help or information from relatives or friends in the city in the Bassac River, Boeng Kak and Boeng Salang settlements (all $p > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge squatter settlement ($p = 0.001 < 0.05$). In the case of the East Preah Monivong Bridge settlement, more new migrants had relatives or friends and received help and information from them before and during their migration to Phnom Penh compared with the long-term migrants.

Table 5-1.2: Number of the Studied Population Who Received Information or Help before Moving to the City by Migration Status

Migration status	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.	Had no relative/friend	Had relative/friend	Received help/inform.
Long-term migrant	12 17.1	17 24.3	16 22.3	19 27.1	17 24.3	17 24.3	27 38.6	33 47.1	24 34.3	25 35.7	23 32.9	23 32.9
New migrant	6 8.6	35 50.0	32 45.7	0 0	34 48.6	34 48.6	0 0	10 14.3	9 12.9	0 0	22 31.4	22 31.4
Total:	18 25.7	52 74.3	48 68.6	19 27.1	51 72.9	51 72.9	27 38.6	43 61.4	33 47.1	25 35.7	45 64.3	45 64.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 4.15$, $p = 0.12$ - N.S.

East Preah Monivong Br.: $\chi^2 = 28.04$, $p = 0.001 < 0.05$ - S.

Boeng Kak: $\chi^2 = 5.66$, $p = 0.06$ - N.S.

Boeng Salang: $\chi^2 = 3.70$, $p = 0.15$ - N.S.

This situation, as mentioned in earlier chapters, is due to the mass movement of people into the abandoned cities after the collapse of the Khmer Rouge regime, even though many had never lived in those places before and did not have any relatives or friends there. Therefore, those rural-to-urban migrants in Table 5-1.1 who seem to have lacked knowledge about the city before migration did not just give up their rural lives to take the risk of moving to and settling in the city.

In fact, these people knew that at the time (between 1979 to 1988) most parts of the city were under-populated and they had a good chance of finding accommodating in Phnom Penh even without help from relatives or friends. It is noticed that only around 10 per cent of Phnom Penh's current population are originally from other urban areas or lived in Phnom Penh before the Khmer Rouge came to power, while most of the rest came from rural areas after the collapse of the Khmer Rouge regime¹.

In relation to gender structure, Table 5-1.3 reveals that, in general, the majority of both the male and female populations had relatives or friends in the city before their migration. However, the situation differs among the four studied settlements. The Chi-square test results in Table 5-1.3 reveal that there is no significant association between the studied population's gender structure and the help or information they received from relatives or friends in the city in the case of the Bassac River and Boeng Kak settlements ($p = 0.97$ and $0.08 > 0.05$). However, the test results show there is a significant association between the two variables in the East Preah Monivong Bridge squatter and Boeng Salang slum settlements (all $p < 0.05$).

Table 5-1.3: Number of the Studied Population Who Received Information or Help before Moving to the City by Gender Structure

Gender	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.
Male	9 12.9	23 32.9	22 31.5	18 25.7	15 21.4	15 21.4	15 21.4	17 24.3	14 20.0	25 35.7	15 21.5	15 21.4
Female	9 12.9	29 41.3	26 37.1	1 1.4	36 51.5	36 51.4	12 17.1	26 37.1	19 27.1	0 0	30 42.9	30 42.9
Total:	18 25.7	52 74.3	48 68.6	19 27.1	51 72.9	51 72.9	27 38.6	43 61.4	33 47.1	25 35.7	45 64.3	45 64.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River $\chi^2 = .008, p = 0.97 > 0.05$ -N. S.

East Pr. Monivong Bridge: $\chi^2 = 11.49, p = 0.001 < 0.05$ -S.

Boeng Kak: $\chi^2 = .806, p = 0.08 > 0.05$ -N.S.

Boeng Salang: $\chi^2 = 5.33, p = 0.020 < 0.05$ -S.

In the case of the East Preah Monivong Bridge and Boeng Salang settlements more members of the female population had relatives or friends and received help and information from them before and during their migration to Phnom Penh compared with their male counterparts. It is not surprising

¹ Sources: Personal communication with many experienced senior officers of the Phnom Penh Municipality and the ministry of Planning before and during the fieldwork 1996-1997.

that the female population had a high propensity for receiving help and information before and during their migration, since the Khmer tradition promotes a conservative view of feminism. Girls or women either follow their spouses in migration or are expected to live with their relatives or friends in the places of destination. They are unlikely to migrate to new places on their own, not to mention migrating alone without any help or information, as discussed in the following pages.

In relation to the studied population's age structure, Table 5-1.4 reveals that the majority of the population aged 16-25, 26-35 and 36-49 had relatives or friends in the city before their migration. However, there is no such trend among the population aged 50-70. The Chi-square test results in Table 5-1.4 reveal that there is no significant association between the studied population's age structure and whether help or information was received from relatives or friends in the city in the case of the East Preah Monivong Bridge, Boeng Kak and Boeng Salang settlements ($p = 0.067$, 0.86 and $0.65 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the Bassac River settlement ($p = 0.03 < 0.05$).

Table 5-1.4: Number of the Studied Population Who Received Information or Help before Moving to the City by Age Structure

Age structure	Bassac River			East Preah Monivong Bridge			Boeng Kak			Boeng Salang		
	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.	Had no relative/friend	Had relative/friend	Received help/info.
16-25	0 0	10 14.3	9 12.9	0 0	27 38.6	27 38.6	2 2.9	13 18.6	8 11.4	0 0	3 4.3	3 4.3
26-35	5 7.1	19 27.1	19 27.1	7 10.0	9 12.9	9 12.9	9 12.9	19 27.1	17 24.3	4 5.7	7 10.0	7 10.0
36-49	8 11.4	17 24.3	16 22.9	11 15.7	13 18.6	13 18.6	9 12.9	6 8.6	5 7.1	15 21.4	29 41.4	29 41.4
50-70	5 7.1	6 8.6	4 5.7	1 1.4	2 2.9	2 2.9	7 10.0	5 7.1	3 4.3	6 8.6	6 8.6	6 8.6
Total:	18 25.7	52 74.3	48 68.6	19 27.1	51 72.9	51 72.9	27 38.6	43 61.4	33 47.1	25 35.7	45 64.3	45 64.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 8.91$, $p = 0.03 < 0.05$ -S.

East Pr. Monivong Bridge: $\chi^2 = 7.14$, $p = 0.067 > 0.05$ -N.S.

Boeng Kak: $\chi^2 = 6.57$, $p = 0.86 > 0.05$ - N.S.

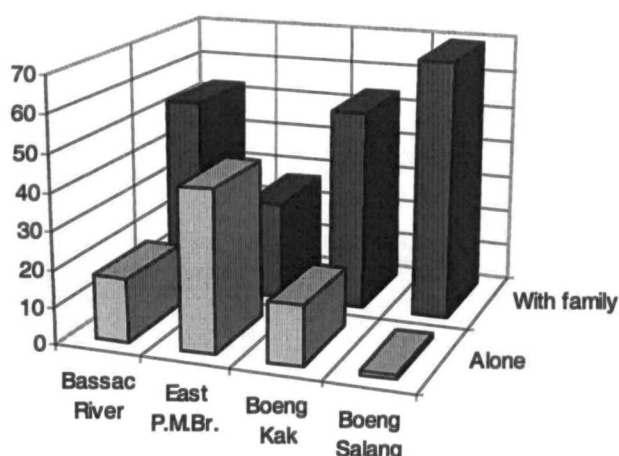
Boeng Salang: $\chi^2 = 1.60$, $p = 0.65 > 0.05$ - N.S.

In the case of the Bassac River settlement more members of the youngest population (aged 16 to 25) had relatives or friends and received help and information from them before and during their migration than their senior counterparts. Thus, while women are unlikely to migrate without having

made preparations - such as receiving information and help - the young population face a similar situation. However, in general, the population's age has no association with the connections in the city before migration as illustrated by the Chi-square tests.

- The Situation of Migration to Phnom Penh:

Figure 5-1.2: The Situation of Migration to Phnom Penh of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In general, Figure 5-1.2 reveals that the majority of the studied population migrated to Phnom Penh with their families. However, the situation differs in each settlement. For example, in the East Preah Monivong Bridge settlement, the majority of the population migrated to the city alone, in contrast to the rest of the studied settlements. It also shows that all but one of the respondents in the Boeng Salang settlement migrated to the city with their families. In relation to the studied population's type of migration, Table 5-1.5 reveals that, in general, the majority of rural- and other cities-Phnom Penh migrants moved to the city with their families. In contrast, the majority of the Vietnamese immigrants migrated to Phnom Penh alone.

As discussed in section 4-2, it is understood that the majority of the Vietnamese immigrants are young, single and in search of a better income in Phnom Penh. Thus, this group came alone as they either had friends or relatives waiting in Phnom Penh, or they had already received enough information of where to live and the prospect of getting a jobs in Phnom Penh via their friends or relatives. The Cambodian migrants, especially those who migrated to the city before 1985, came

with their families as a result of the collapse of the Khmer Rouge regime and the then government policies of rehabilitating urban places.

The Chi-square test results in Table 5-1.5 reveal that there is no significant association between the studied population's migration type and the way the population migrated to the city in the case of the Bassac River settlement ($p = 0.43 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge, Boeng Kak squatter and Boeng Salang slum settlements (all $p < 0.05$). In the case of the East Preah Monivong Bridge settlement, more Vietnamese immigrants migrated to Phnom Penh alone compared with rural-Phnom Penh and other cities-Phnom Penh migrants.

Table 5-1.5: The Situation of Migration to the City of the Studied Population by Migration Type

Migration type	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Alone	With family	Alone	With family	Alone	With family	Alone	With family
Rural-P. Penh migrant	11 15.7	27 38.6	2 2.9	23 32.9	15 21.4	46 65.7	1 1.4	59 84.3
Other cities-P. Penh migrant	0 0	6 8.6	4 5.7	0 0	1 1.4	8 11.4	0 0	10 14.3
Vietnamese immigrant	6 8.6	20 28.6	37 52.9	4 5.7	0 0	0 0	0 0	0 0
Total	17 24.3	53 75.7	43 61.4	27 38.6	16 22.9	54 77.1	1 1.4	69 98.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 7.97$, $p = 0.43$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 65.39$, $p = 0.01 < 0.05$ -S.

Boeng Kak settlement: $\chi^2 = 12.78$, $p = 0.006 < 0.05$ -S.

Boeng Salang settlement: $\chi^2 = 11.84$, $p = 0.003 < 0.05$ - S.

In the case of the Boeng Salang slum settlement, more other cities-Phnom Penh migrants migrated to the city with their families compared with rural-Phnom Penh migrants. However, it is difficult to draw a conclusion in the case of the Boeng Kak settlement, since the majority of both types of migrants came to the city with their families. However, more other cities-Phnom Penh migrants (8 out of 9 respondents) migrated with their families compared with rural-Phnom Penh migrants (46 out of 61 respondents). In short, the general picture among the four settlements is that more other cities-Phnom Penh migrants migrated to the city with their families at first compared with the other types of migrants.

In terms of the relationship between the studied population's status of migration and the way they migrated to the city, Table 5-1.6 reveals that the majority of both long-term and new migrants

moved to Phnom Penh with their families. However, the situation differs from one settlement to another. The Chi-square test results in Table 5-1.6 reveal that there is no significant association between the studied population's migration status and the way they migrated to the city in the case of the Bassac River and Boeng Salang settlements ($p = 0.24$ and $0.23 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge and Boeng Kak squatter settlements ($p = 0.02$ and $0.001 < 0.05$).

Table 5-1.6: The Situation of Migration to the City of the Studied Population by Migration Status

Migration status	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Alone	With family	Alone	With family	Alone	With family	Alone	With family
Long-term migrant	4 5.7	25 35.8	15 21.4	21 30.0	10 14.3	50 71.4	0 0	48 68.6
New migrant	13 18.6	28 39.9	28 40.0	6 8.6	6 8.6	4 5.7	1 1.4	21 30.0
Total	17 24.3	53 75.7	43 61.4	27 38.6	16 22.9	54 77.1	1 1.4	69 98.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 5.43$, $p = 0.24$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 24.76$, $p = 0.02 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 18.76$, $p = 0.001 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 5.5$, $p = 0.23$ - N.S.

In the case of the East Preah Monivong Bridge and Boeng Kak settlements, more new migrants migrated to Phnom Penh alone compared with long-term migrants. This is not surprising, as mentioned earlier, because it was easier to find a place to live for those who migrated to the city before 1990 compared with those who migrated to the city after 1990. This is because during this early period Cambodia as a whole was isolated from foreign investment and the country had a relatively central market economy. In that situation the majority of migrants to Phnom Penh were able to negotiate affordable prices - often with the authorities - for land. However, that was no longer the case after the country recognised property rights at the end of 1989, when land and housing in especially the city become very expensive (see Chapter 1). Thus, it is very likely that new migrants have to come to the city alone at first to secure accommodation for the rest of the family.

In relation to the studied population's gender structure and the way they migrated to the city, Table 5-1.7 reveals that the majority of both the male and female populations migrated to Phnom Penh with their families at first. However, the situation differs among the four studied settlements where, for example, the majority of the female population migrated to the city alone at first in the case of

the East Preah Monivong Bridge settlement. The Chi-square test results in Table 5-1.7 reveal that there is no significant association between the studied population's gender structure and the way the population migrated to the city in the case of the Bassac River, Boeng Kak and Boeng Salang settlements ($p = 0.35, 0.70$ and $0.72 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.001 < 0.05$).

Table 5-1.7: The Situation of Migration to the City of the Studied Population by Gender Structure

Gender structure	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Alone	With family	Alone	With family	Alone	With family	Alone	With family
Male	6 8.6	26 37.1	11 15.7	22 31.4	8 11.4	24 34.3	0 0	40 57.1
Female	11 15.7	27 38.6	32 45.7	5 7.1	8 11.4	30 42.8	1 1.4	29 40.5
Total	17 24.3	53 75.7	43 61.4	27 38.6	16 22.9	54 77.1	1 1.4	69 98.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 2.04, p = 0.35 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 22.09, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = .711, p = 0.70 > 0.05$ - N.S.

Boeng Salang settlement: $\chi^2 = 5.24, p = 0.72 > 0.05$ - N.S.

In the case of the East Preah Monivong Bridge settlement more members of the female population migrated to Phnom Penh alone at first compared with their male counterparts. It is not surprising that the female population have high propensity in migrating to the city alone at first since the majority of them, as discussed earlier, are young, single Vietnamese. This group does not intend to bring their families to Phnom Penh since they came to the city to earn an income with which to support their families back home in Vietnam. It is also noticed that the majority of the Vietnamese population in Phnom Penh, especially those involved in the sex industry (which is the case for most of the Vietnamese population of this study), are illegal immigrants². Therefore, it could take years before they have the necessary documents (possibly through bribing the authorities) to bring their families to Phnom Penh if they want to do so.

In relation to the studied population's age structure and the way they migrated to Phnom Penh, Table 5-1.8 reveals that the majority of the population aged 16-25 migrated to the city alone at first.

² Although there are countless Khmer and English news reports in the local and international media about this issue, the information used here was obtained through informal interviews by the author with local authorities in Phnom Penh and the ministry of the interior.

However, the majority of the population aged 26-35, 36- 49 and 50-70 migrated to the city with their families at first. The Chi-square test results in Table 5-1.8 reveal that there is no significant association between the studied population's age structure and the way they migrated to the city at first in the case of the Bassac River and Boeng Salang settlements ($p = 0.09, 0.86$ and $0.69 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge and Boeng Kak settlements ($p = 0.001$ and $0.010 < 0.05$).

In the case of the East Preah Monivong Bridge settlement, more members of the youngest population (aged 16 to 25) migrated to the city alone at first compared with their senior counterparts. However, it is difficult to reach a conclusion in the case of the Boeng Kak settlement, since the majority of all age groups in this settlement migrated to the city with their family at first. The main reason why the youngest group of the population migrated to the city alone at first lies in the fact that most of this group are Vietnamese immigrants, whose reason for migration to Phnom Penh involved no other members of their family.

Table 5-1.8: The Situation of Migration to the City of the Studied Population by Age Structure

Age	Bassac River		East Preah Monivong Bridge		Boeng Kak		Boeng Salang	
	Alone	With family	Alone	With family	Alone	With family	Alone	With family
16-25	6 8.6	4 5.7	26 37.2	1 1.4	5 7.1	10 14.3	0 0	3 4.3
26-35	4 5.7	20 29.6	6 8.6	10 14.3	5 7.1	23 32.9	0 0	11 15.7
36-49	6 8.6	19 28.2	10 14.3	14 20.0	5 7.1	10 14.3	1 1.4	43 61.5
50-70	1 1.4	10 14.3	1 1.4	2 2.9	1 1.4	11 15.7	0 0	12 17.1
Total	17 24.3	53 75.7	43 61.4	27 38.6	16 22.9	54 77.1	1 1.4	69 98.6

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 10.94, p = 0.09 > 0.05$ - N.S.

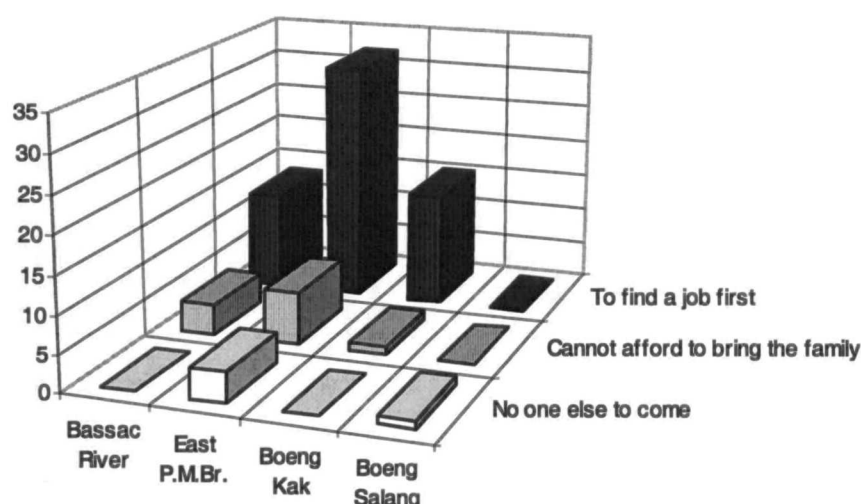
East Preah Monivong Bridge settlement: $\chi^2 = 30.30, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 16.64, p = 0.010 < 0.05$ - S.

Boeng Salang settlement: $\chi^2 = 3.87, p = 0.69 > 0.05$ - N.S.

As shown in Figure 5-1.3, it can also be argued that they came alone at first to work and save enough money to bring the rest of their family at a later stage if they wanted to do so, as mentioned above. In the case of the young Cambodian population who migrated to the city alone at first, Figure 5-1.3 reveals that most of them came alone at first because they wanted to find a job before bringing the whole family to live with them.

Figure 5-1.3: The Reasons for Migrating to Phnom Penh Alone at First of the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In contrast, the majority of the older group are those who migrated to the city before 1990, when it was relatively easier to accommodate the whole family at once. Another reason is the fact that economic development has transformed Phnom Penh from a ruined, dead city to a new centre of foreign investment, particularly after the national election in 1993. The sector that has enjoyed the most growth has been the service industry from 1992 to 1995. As a result, many of the young migrants came to the city in response to the demand for labour. These normally young migrants not only came to the city alone, but remained so. From 1996 to 1999 (as reported in the Phnom Penh Post: 1999) there has been a boom in the city's garment manufacturing industry, which employed more than 100.000 workers in 1999 (Ibid.).

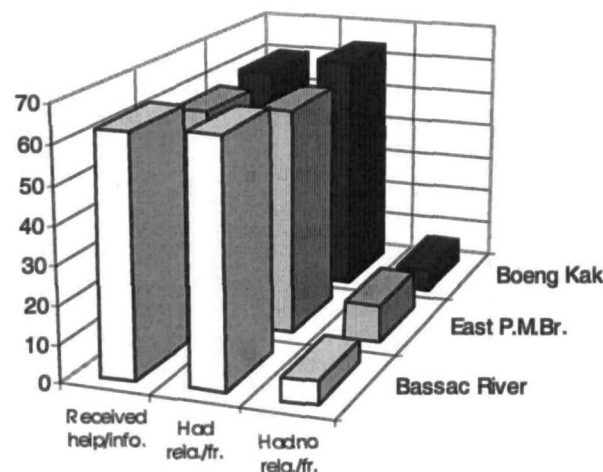
Most of these workers are Cambodian migrants who came from rural areas to the city. They are tenants in mainly the squatter and slum settlements, where they can afford the rent (Fieldwork: 1997). Thus, most of them came to the city alone and are likely to remain so for the long term, since most of their families tend the rice field at home and do not plan to come to the city. In short, the way the population came to the city has been shaped by the development of the city's economy, which dictated the characteristics of migrants recruited in response to the specific demands of the city's economy.

5-2 The Situation of Movement into the Studied Settlements

The previous chapter discussed how people migrate to Phnom Penh. In this chapter, the paper continues to examine the process of migration of the same studied population into the squatter and slum settlements as their final stage of migration at the time of the interview (in other words, regardless of whether they move from these areas). The paper proceeds in the same way as the previous examinations by comparing one settlement to another. The findings of the separate settlements are then compared in the summary at the end of this chapter.

- Squatters and their Connections with the Squatter Settlements:

Figure 5-2.1: The Connections between the Studied Population and Their Relatives/Friends in the Studied Squatter Settlements



Source: Compiled from the cross tabulation of SPSS of the field survey(Sep., 1997- Jan., 1998)

In general, Figure 5-2.1 shows that the majority of the studied population had relatives or friends living in the studied squatter settlements before their move to the area. It also shows that the majority of those who had relatives or friends living in the studied settlements before their move received help and information from them before and during their move to the settlements. In comparison with the way the studied population migrated to the city (See Figure 5-1), the number of the population who did not have relatives or friends before moving to the squatter settlements is half of the number when they migrated to the city. It partly implies that the population has to have better connections to move into the squatter settlements than to move to the city.

The reason for is because, as mentioned in the previous section, migration to the city - especially before 1990 - was relatively easy in the sense of finding accommodation. In a different situation – that of moving into the squatter settlements, even only as squatter tenants - the population needs to be better prepared and to collect information so they can evaluate the risk of confrontation with or being evicted by the authorities. Therefore, it is understandable that the number of the population who received help and information before their move to the squatter settlements is higher than when they migrated to the city. Without such help and information from friends and relatives the Vietnamese immigrants could find it very difficult to find accommodation in the squatter areas, since they are more vulnerable in terms of communication and legal terms than their Cambodian counterparts. However, compared with the migrants from other cities to Phnom Penh, the rural-to-urban migrants also face difficulties obtaining houses in the city without help from relatives or friends since they have no experience of city life, let alone of finding accommodation in squatter settlements where residents live under great pressure from the authorities.

Table 5.2-1: Number of The Studied Squatter Population Who Received Information or Help before Moving to the Settlements by the Types of Migration

Types of migration	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative/friend	Had relative/friend	Received information/help	Had no relative/friend	Had relative/friend	Received information/help	Had no relative/friend	Had relative/friend	Received information/help
Rural-Phnom Penh	4 5.7	34 48.6	34 48.6	9 12.9	16 22.9	14 20.0	4 5.7	57 81.4	54 77.1
Other cities-Phnom Penh	2 2.9	4 5.7	3 4.3	0 0	4 5.7	4 5.7	2 2.9	7 10.0	6 8.6
Vietnamese immigrant	0 0	26 37.1	26 37.1	1 1.4	40 57.1	40 57.1	0 0	0 0	0 0
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 82.8	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 16.20$, $p = 0.001 < 0.05$ - S.

East Preah Monivong Br. $\chi^2 = 29.63$, $p = 0.001 < 0.05$ - S.

Boeng Kak: $\chi^2 = 3.96$, $p = 0.26 > 0.05$ - N.S.

In relation to the studied population's type of migration, Table 5-2.1 reveals that the majority of all types of migration - rural-, other cities-Phnom Penh migrants and almost all of the Vietnamese immigrants - had relatives or friends in the settlements before their move. The Chi-square test results in Table 5-2.1 reveal that there is no significant association between the studied population's migration type and the help or information provided by their relatives or friends in the city in the case of the Boeng Kak settlement ($p = 0.26 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the Bassac River and East Preah

Monivong Bridge settlements ($p = 0.001$ and $0.001 < 0.05$). In both cases of the Bassac River and East Preah Monivong Bridge settlements, more Vietnamese immigrants had relatives or friends and received help and information from them before and during their move into the settlements compared with rural-Phnom Penh and other cities-Phnom Penh migrants. In general, the Vietnamese immigrants of the studied population were better prepared before their move to the studied settlements compared with other cities-Phnom Penh migrants, as explained above.

In relation to the studied population's status of migration, Table 5-2.2 reveals that the majority of both long-term and new migrants had relatives or friends in the studied settlements before their move, which is the case for all the studied settlements. The majority of those who had relatives or friends also received help and information from them before and during their move into the settlements. The Chi-square test results in Table 5-2.2 reveal that there is no significant association between the studied population's migration status and the help or information provided by their relatives or friends in the settlements in the case of the Bassac River and Boeng Kak settlements ($p = 0.53$ and $0.34 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.011 < 0.05$). In the case of the East Preah Monivong Bridge settlement, more new migrants had relatives or friends and received help and information from them before and during their move to the settlement compared with the long-term migrants.

Table 5.2-2: Number of the Studied Squatter Population Who Received Information or Help Before Moving to the Settlements by the Status of Migration

Status of migration	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative/ friend	Had relative/ friend	Received informati on/help	Had no relative/ friend	Had relative/ friend	Received informati on/help	Had no relative/ friend	Had relative/ friend	Received informati on/help
Long-term migrant	3 4.3	26 37.1	25 35.7	10 14.3	26 37.1	24 34.2	6 8.6	54 77.1	50 71.4
New migrant	3 4.3	38 54.3	38 54.3	0 0	34 48.6	34 48.6	0 0	10 14.3	10 14.3
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 96.7	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 1.24$, $p = 0.53$ - N.S.

East Preah Monivong Br.: $\chi^2 = 7.48$, $p = 0.01 < 0.05$ - S.

Boeng Kak: $\chi^2 = 2.12$, $p = 0.34$ - N.S.

This is because as the number of squatter settlements increases year by year, local authorities come under greater pressure from the central government and landowners to tackle the issue. It was

relatively easier to squat or live in squatter settlements in the early years (say before 1993) than in recent years. Therefore, at present (at the time of this fieldwork: 1997) one has to bribe¹ both the chief of the squatter communities and local authorities in order to live in squatter settlements, while in the early period it would only have been necessary to bribe the local authorities. Thus, it is not surprising that new migrants have to be better prepared with information and help from their relatives or friends who live in and have experience of the squatter settlements before joining them there.

In relation to the studied population's gender structure, Table 5-2.3 reveals that, like the two cases above, the majority of both the male and female populations had relatives or friends in the squatter settlements before their move. This is the case in all the studied settlements. The Chi-square test results in Table 5-2.3 reveal that, as in the case above, there is no significant association between the studied population's gender structure and the help or information provided by their relatives or friends in the squatter settlements in the case of the Bassac River and Boeng Kak settlements ($p = 0.52$ and $0.09 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.001 < 0.05$).

Table 5.2-3: Number of the Squatter Population Who Received Information or Help before Moving to the Settlements by Gender Structure

Gender structure	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative/friend	Had relative/friend	Received information/help	Had no relative/friend	Had relative/friend	Received information/help	Had no relative/friend	Had relative/friend	Received information/help
Male	3 4.3	29 41.4	28 40.0	10 14.3	23 32.9	21 30.0	3 4.3	29 41.4	25 37.1
Female	3 4.3	36 51.4	35 50.0	0 0	37 52.9	37 61.7	3 4.3	35 50.0	35 50.0
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 82.9	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 0.40$, $p = 0.52 > 0.05$ - N.S.

East Preah Monivong Br.: $\chi^2 = 16.23$, $p = 0.001 < 0.05$ - S.

Boeng Kak: $\chi^2 = 2.77$, $p = 0.09 > 0.05$ - N.S.

In the case of the East Preah Monivong Bridge settlement, more members of the female population had relatives or friends and received help and information from them before and during their move to the settlement compared with their male counterparts. Further studies are needed on this issue.

¹ In South-east Asian communities small bribes paid to someone who did one a favour are regarded as a show of gratitude rather than as bribery, as seen in the Western world. Sources of the information were withheld by the author in accordance with the privacy guarantee promised to the interviewees during the fieldwork 1996-1997.

However, like in the case of migration to Phnom Penh, it is not surprising that the female population has a high propensity to receive help and information before and during their migration since the Khmer tradition promotes a conservative view of feminism. Girls or women tend to follow their spouses in migration and are unlikely to move to a new place on their own, even if they are the head of the household such as a widow.

In relation to the studied population's age structure, like in the cases above, Table 2-2.4 reveals that the majority of all age groups had relatives or friends in the squatter settlements before their move, and the situation is the same in all the studied settlements. The Chi-square test results in Table 5-2.4 reveal that, like in the cases above, there is no significant association between the studied population's age structure and the help or information provided by their relatives or friends in the city in the case of the Boeng Kak settlement ($p = 0.10 > 0.05$). However, the test results show there is a significant association between the two variables in the Bassac River and East Preah Monivong Bridge settlements ($p = 0.03$ and $0.025 < 0.05$).

Table 5.2-4: Number of the Studied Squatter Population Who Received Information or Help before Moving to the Settlements by Age Structure

Age structure	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative/ friend	Had relative/ friend	Received informati on/help	Had no relative/ friend	Had relative/ friend	Received informati on/help	Had no relative/ friend	Had relative/ friend	Received informati on/help
16-25	0 0	10 14.3	10 14.3	0 0	27 38.6	27 38.6	0 0	15 21.4	15 21.4
26-35	3 4.3	21 30.0	20 28.6	4 5.7	11 15.7	12 17.1	3 4.3	25 35.7	24 34.3
36-49	0 0	25 35.7	25 35.7	5 7.1	19 37.1	17 24.3	0 0	14 20.0	13 18.6
50-70	3 4.3	8 11.4	8 11.4	1 1.4	2 2.9	2 2.9	3 4.3	9 12.9	8 11.4
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 82.9	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and receive information/help are presented as follows:

Bassac River: $\chi^2 = 8.72$, $p = 0.03 < 0.05$ - N.S.

East Preah Monivong Br.: $\chi^2 = 9.27$, $p = 0.025 < 0.05$ - S.

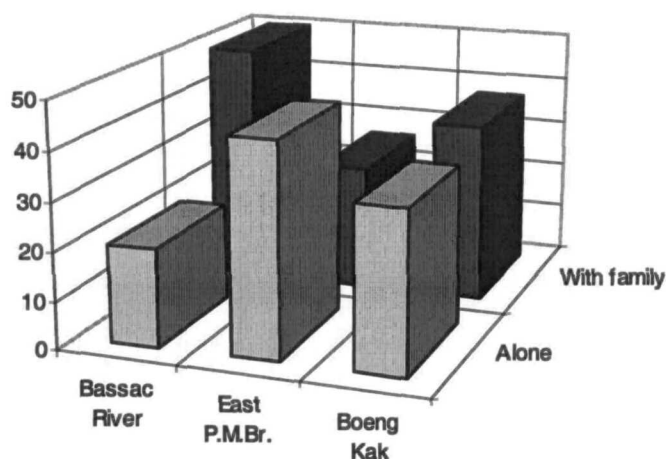
Boeng Kak: $\chi^2 = 6.06$, $p = 0.10 > 0.05$ - N.S.

In the case of the Bassac River settlement, more members of the population aged 16 to 25 and 36 to 49 had relatives or friends and received help and information from them before and during their move compared with other age groups. In the case of East Preah Monivong Bridge, more members of the youngest population (aged 16 to 25) had relatives or friends and received help and information from them before and during their move compared with other age groups. In short, the

youngest population dominate among those who received help compared with the other age groups. This young population is also mostly female, from which follows that they need the help of relatives or friends in squatter settlements to settle there both because they are female and because they are young.

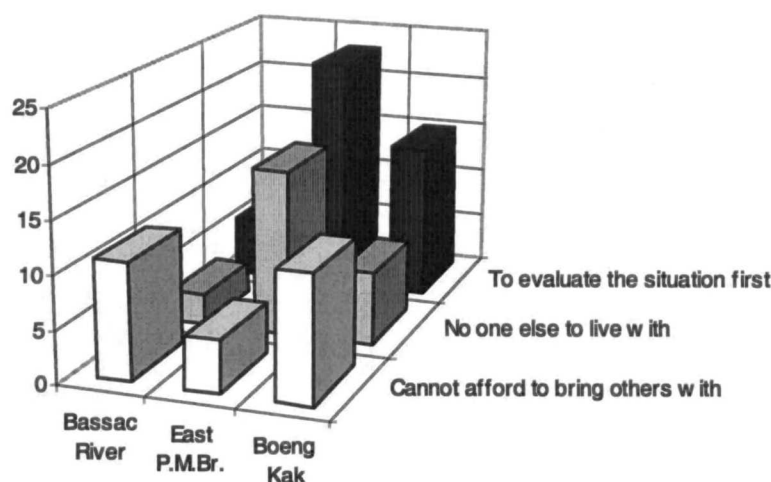
-The Situation of Movement into the Squatter Settlements:

Figure 5-2.2: The Situation of Moving to the Studied Squatter Settlements at First



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In general, Figure 5-2.2 reveals that the number of the population moving to the squatter settlements alone at first is higher than when they migrated to Phnom Penh. Although there is little use in comparing the two situations, one of the implications is that moving to the squatter settlements are more precarious than migrating to the city. As shown in Figure 5-2.3, the majority of those who move into the squatter settlements alone at first did so because they wanted to evaluate the risk of living in the squatter settlements. This is because, unlike migration to the city, which the government does not object to even though it is not encouraged, living in squatter settlements is discouraged. Squatters also run the risk of being forcefully evicted, as have happened in many cases. Thus, squatters have good reason to be more cautious when moving to such settlements than when they migrated to the city.

Figure 5-2.3: The Reasons for Moving to the Studied Squatter Settlements Alone at First

Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In relation to the studied population's type of migration, Table 5-2.5 reveals that the majority of rural-Phnom Penh migrants moved to the squatter settlements with their family at first. In contrast, the majority of the other cities-Phnom Penh migrants and the Vietnamese immigrants moved to the squatter settlements alone at first. It is understood, as discussed in section 4-2, that the majority of rural-Phnom Penh migrants are long-term migrants. Thus, most of them who came to the squatter settlements with their families did so in the early years of squatter settlements' existence, when squatting was tolerated by the authorities (Interviews with experienced professionals: 1997). We also know that the majority of the Vietnamese immigrants are young and single. Thus, they came alone at first to the squatter settlements, as shown in Figure 5-1.3. For those came from other cities, almost half of them arrived alone and the rest came with their families.

The Chi-square test results in Table 5-2.5 reveal that there is no significant association between the studied population's migration type and the way the population moved into the squatter settlements in the case of the Bassac River and Boeng Kak settlements ($p = 0.30$ and $0.062 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.001 < 0.05$). In the case of the East Preah Monivong Bridge settlement, more other cities-Phnom Penh migrants and Vietnamese immigrants migrated to Phnom Penh alone at first compared with rural-Phnom migrants. The reasons for doing so are discussed above.

Table 5.2-5: The Situation of Moving to the Studied Squatter Settlements of the Interviewees by Types of Migration

Types of Migration	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Alone	With family	Alone	With family	Alone	With family
Rural-Phnom Penh	12 17.1	26 37.1	6 8.6	19 27.1	29 41.4	32 45.7
Other cities-Phnom Penh	2 2.9	4 5.7	4 5.7	0 0	4 5.7	5 7.1
Vietnamese immigrant	6 8.6	20 28.6	34 48.6	7 10.0	0 0	0 0
Total	20 28.6	50 71.4	44 62.9	26 37.1	33 47.1	37 52.8

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 9.41$, $p = 0.30$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 75.93$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 11.8$, $p = 0.06$ - N.S.

In terms of the relationship between the studied population's status of migration and the way they migrated to the squatter settlements, Table 5-2.6 reveals that the majority of long-term migrants moved into the squatter settlements with their families at first. In contrast, the majority of new migrants moved into the squatter settlements alone at first. However, the situation differs from one settlement to another. In addition, the Chi-square test results in Table 5-2.6 reveal that there is a significant association between the studied population's migration status and the way they moved to the squatter settlements in all the studied settlements (all $p < 0.05$).

Table 5.2-6: The Situation of Moving to the Studied Squatter Settlements of the Interviewees by Types of Migration

Status of Migration	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Alone	With family	Alone	With family	Alone	With family
Long-term migrant	6 8.6	23 32.8	16 22.9	13 18.6	27 38.6	33 47.1
New migrant	14 20.0	27 38.6	28 40.0	6 8.6	6 8.6	4 5.7
Total	20 28.6	50 71.4	44 62.9	26 37.1	33 47.1	37 52.8

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 14.33$, $p = 0.02 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 15.06$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 13.73$, $p = 0.001 < 0.05$ - S.

In the case of the Boeng Kak settlement, more new migrants moved to the squatter settlement alone at first compared with the long-term migrants. However, despite the test results being significant, making any precise conclusion is unlikely since, as Table 5-2.6 shows, the majority of both long-term and new migrants moved into the squatter settlements with their families at first in the case of Bassac River, and alone at first in the case of East Preah Monivong Bridge. However, in relation to each status of migration, we could conclude that more long-term migrants moved to the

squatter settlement with their families at first compared with the new migrants (23 out of 29 compared with 27 out of 41 new migrants in Bassac River, and 13 out of 29 compared with 6 out of 34 in East Preah Monivong Bridge respectively. The reasons for these differences in the situation of moving to the squatter settlements are discussed above.

In relation to the studied population's gender structure and the way they moved to the squatter settlements, Table 5-2.7 reveals that the majority of both the male and female populations moved into the squatter settlements with their families at first. However, the situation differs among the three studied squatter settlements. For example, the majority of the female population moved to the settlement alone at first in the case of the East Preah Monivong Bridge settlement. The Chi-square test results in Table 5-2.7 reveal that there is no significant association between the studied population's gender structure and the way the population moved to the settlement in the case of the Bassac River settlement ($p = 0.44 > 0.05$). However, the test results show there is a significant association between the two variables in the case of the East Preah Monivong Bridge and Boeng Kak settlements ($p = 0.001$ and $0.019 < 0.05$).

Table 5.2-7: The Situation of Moving to the Studied Squatter Settlements of the Interviewees by their Gender Structure

Status of Migration	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Alone	With family	Alone	With family	Alone	With family
Male	10 14.3	22 31.4	12 17.1	21 30.0	18 25.7	14 20.0
Female	10 14.3	28 40.0	32 45.7	5 7.1	15 21.4	23 32.8
Total	20 28.6	50 71.4	44 62.9	26 37.1	33 47.1	37 52.8

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 1.61$, $p = 0.44 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 19.27$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 7.90$, $p = 0.019 < 0.05$ - S.

In the case of the East Preah Monivong Bridge settlement, more members of the female population moved to the settlement alone at first compared with their male counterparts. As mentioned earlier, most of the Vietnamese immigrants are single and have no one else in their family to live with them in Phnom Penh. Therefore, they moved also moved to the squatter settlements alone. In contrast, more female migrants moved to the settlement with their families at first compared with their male counterparts in the Boeng Kak settlement. In this case, where there is no Vietnamese immigrants, most of the female migrants are young Cambodians who came to the city alone and therefore also moved to the squatter settlement alone. In short, women tend to move to the settlements alone at

first because they live alone in the city, while men appear more likely to move with their families because many of them did so at the time when squatting was better tolerated by the authorities.

In relation to the studied population's age structure and the way they moved into the squatter settlement, Table 5-2.8 reveals that the majority of the population aged 16-25 moved to the settlement alone at first. In contrast, the majority of the population aged 26-35, 36- 49 and 50-70 moved to the settlements with their families at first. The Chi-square test results in Table 5-2.8 reveal that there is no significant association between the studied population's age structure and the way they migrated to the city at first in the case of the Bassac River settlement ($p = 0.067 > 0.05$). However, the test results show there is a significant association between the two variables in the cases of the East Preah Monivong Bridge and Boeng Kak settlements ($p = 0.001$ and $0.005 < 0.05$).

Table 5.2-8: The Situation of Moving to the Studied Squatter Settlements of the Interviewees by their Age Structure

Status of Migration	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Alone	With family	Alone	With family	Alone	With family
16-25	7 10.0	3 4.3	26 37.2	1 1.4	12 17.1	3 4.3
26-35	5 7.1	19 27.1	9 12.9	7 10.0	7 10.0	21 30.0
36-49	4 5.7	21 30.0	8 11.4	16 22.9	9 12.9	6 8.6
50-70	4 5.7	7 10.0	1 1.4	2 2.9	5 7.1	7 10.0
Total	20 28.6	50 71.4	44 62.9	26 37.1	33 47.1	37 52.9

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 11.74, p = 0.06 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 26.92, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 18.50, p = 0.005 < 0.05$ - S.

In the case of the East Preah Monivong Bridge settlement, more members of the younger population (aged 16 to 25 and 26-35) moved to the settlement alone at first compared with their senior counterparts. However, in the case of the Boeng Kak settlement the results are mixed, as the majority of the population aged 16 to 25 and 36 to 49 moved into the settlement alone at first compared with the other age groups.

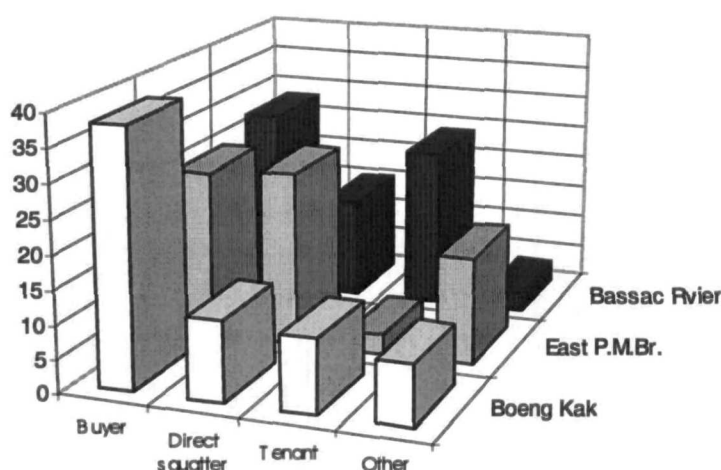
In short, the general view of the three squatter settlements is that the majority of younger populations of the studied settlements move into the settlements alone at first compared with the rest of the age groups. As mentioned earlier and as in the case of the Vietnamese immigrants, most

of the younger migrants did so because no one accompanied them to Phnom Penh. For those older migrants who moved to the squatter settlements with their families at first did so because many of them are long-term migrants who moved to the settlements when there were less confrontation with the authorities, as mentioned earlier.

5.3 The Process of Becoming Squatters:

This section aims to examine the relationship between income, job, type and status of migration¹, and the means of obtaining property in the studied squatter settlements. It also shows the number of direct squatters (or land invaders) and how many are only the tenants of squatter landlords or buyers from direct squatters. In short, this section aims to answer the question of whether or not there is a relationship between job, income, type and status of migration and the means of obtaining property in the studied settlements; i.e. is it true that only the poor or low income migrants squat? The study starts by examining the relationship between the means of obtaining property and job type, followed by level of income, and type and status of migration.

Figure 5-3.1: Numbers of Types of Squatters in the Studied Population



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

It has to be noted that throughout this study direct squatting imply that land was invaded as a means of obtaining property at no charge. While this description was used to comply with the academic nature of the study, the author wishes to point out that the interviewees described this means as the use of vacant land that was available for them to settle down on free of charge. They do not like to regard themselves as squatters or land invaders. The author includes this explanation to honour the wishes of the interviewees in gratitude for their help with and contribution to this study.

¹For details of the classification of job status (formal and informal), income status (low, middle and high-income groups) and types of migration, see Chapter 2.

In general, Figure 5-3.1 shows that the majority of the studied squatter population are property buyers, while only the minority of them are direct squatters (those who invaded land). However, the situation differs among the three studied settlements. For example, the direct squatters account for the majority of the population of East Preah Monivong Bridge, while the property buyers dominate in the Bassac River and Boeng Kak settlements. In Bassac River, the number of squatter tenants is the highest one among the three settlements, while it is lowest in the East Preah Monivong Bridge settlement.

There are two reasons² for the number of direct squatters in the Bassac River and Boeng Kak settlements being lower than in East Preah Monivong Bridge. Firstly, the two settlements' central location makes them attractive to settlers. This increases both property prices and the profits of those who want to sell, which leads to them selling the land to the newcomers. Secondly, the two areas also face the biggest threat of eviction by the authorities, and there have been many evictions since 1992, which also leads to the direct squatters selling land. Many newcomers were encouraged to take this risk because land was often sold at very attractive prices and because many previous eviction attempts failed to prevent the areas being re-squatted. It is also due to the rampant corruption in government that buyer squatters keep buying property in these areas. However, in the case of the East Preah Monivong Bridge settlement, the area does not face a serious threat of eviction due to its suburban location and the fact that land ownership is unclear (especially along the riverbanks).

In relation to each type of job and the method of obtaining property in the squatter settlements, Table 5-3.1 reveals that the majority of all types of employment as well as the unemployed were indirect squatters (mainly buyers and tenants). The Chi-square test results in Table 5-3.1 reveal that there is a significant association between the two variables of the method of obtaining property in the squatter settlements and the types of jobs of the population in all the studied squatter settlements (all $p < 0.05$). By calculating the relationship for each type of job of the population, we concluded that more members of the unemployed group (2 out of 7) tended to be direct squatters compared with the formal (4 out of 11) and informal (9 out of 52) workers.

² The information used in this discussion is the result of long observations by the author, who has been involved with the issue since 1991, and various discussions with many experienced professionals before, during and after the fieldwork: 1996-1997 in Phnom Penh.

Table 5-3.1: The Method of Obtaining Plots or Houses of the Studied Squatter Population by Type of Job

Method of obtaining properties	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Unemplo yed	Informal	Formal	Unemplo yed	Informal	Formal	Unemplo yed	Informal	Formal
Direct squatting	2 2.9	9 12.9	4 5.7	0 0	17 24.3	9 12.9	2 2.9	5 7.1	5 7.1
Buying	4 5.7	21 30.0	3 4.3	1 1.4	19 27.1	5 7.1	8 11.4	11 15.7	19 27.1
Renting	0 0	20 28.6	4 5.7	0 0	1 1.4	2 2.9	1 1.4	9 12.9	1 1.4
Given free of charge	1 1.4	0 0	0 0	0 0	10 14.3	1 1.4	1 1.4	0 0	6 8.6
Looking after property (caretaker)	0 0	2 2.9	0 0	1 1.4	4 5.7	0 0	0 0	2 2.9	0 0
Total	7 10.0	52 74.3	11 15.7	2 2.9	51 72.8	17 24.3	12 17.1	27 38.5	31 44.4

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 52.33$, $p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement : $\chi^2 = 37.73$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 46.35$, $p = 0.001 < 0.05$ - S.

In the case of the East Preah Monivong Bridge settlement, more formal workers (9 out of 17) were direct squatters compared with the unemployed (no direct squatters) and informal (17 out of 51) workers. In the case of the Boeng Kak settlement, the informal workers (5 out of 27) tended to be direct squatters compared with the unemployed (2 out of 12) and the formal workers (5 out of 31). Thus, in general, the often heard accusation by the general population of Phnom Penh³ that those who have power have abused it to squat land and then sell it to the newcomers seems to be grounded.

In terms of the level of income and the method of obtaining property in the squatter settlements, Table 5-3.2 reveals that the majority of all levels of income were indirect squatters (mainly buyers and tenants). However, the situation differs among the three settlements. For example, the low-income migrants were the direct squatters in the case of the East Preah Monivong bridge settlement in contrast with the other studied settlements. The Chi-square test results in Table 5-3.3 reveal that there is no significant association between the method of obtaining property in the squatter settlements and the level of income of the population in the case of the Bassac River settlement ($p = 0.165 > 0.05$).

³ There are no official reports on this accusation, excepted in an opposition newspaper published in the Khmer language in the city since 1993. The author does not wish to name the newspaper since it is not a matter for neutral academic research and could also harm the relevant institution.

However, the test results reveal that there is a significant association between the two variables in the case of the East Preah Monivong bridge and Boeng Kak settlements (all $p = 0.001 < 0.05$). In the case of East Preah Monivong Bridge, the direct squatters are dominated by the low-income population compared with the middle- and high-income population of this settlement. By calculating the relationship for each type of job of the population in the Boeng Kak settlement, we concluded that high numbers of the low-income population (9 out of 41) are the direct squatters compared with the middle- (3 out of 21) and high-income (no direct squatters) populations of this settlement. In general, the low-income population dominate among the direct squatters compared with the middle- and high-income populations.

Table 5-3.2: Methods of Obtaining Plots or Houses of the Studied Squatter Population by Income Distribution

Method of obtaining property	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
Direct squatting	12 17.1	3 4.3	0 0	19 27.1	7 10.0	0 0	9 12.9	3 4.3	0 0
Buying	25 35.7	3 4.3	0 0	2 2.9	5 7.1	18 25.7	23 32.9	12 17.1	3 4.3
Renting	18 25.7	0 0	6 8.6	1 1.4	1 1.4	1 1.4	6 8.6	0 0	5 7.1
Given free of charge	1 1.4	0 0	0 0	0 0	2 2.9	9 12.9	1 1.4	6 8.6	0 0
Looking after property (caretaker)	2 2.9	0 0	0 0	1 1.4	0 0	4 5.7	2 2.9	0 0	0 0
Total	58 82.9	6 8.6	6 8.6	23 32.9	15 21.5	32 45.6	41 58.6	21 30.0	8 11.4

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 26.11$, $p = 0.16$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 39.95$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 49.50$, $p = 0.001 < 0.05$ - S.

In this case the finding seems to collaborate the case of other squatter settlements in developing countries, as discussed in Chapter 2, in that the majority of the squatter population (land invaders) are poor. It is also valid for the case of Phnom Penh, where the government employees are the low-income group, according to what they reported on their salaries during the interviews. However, it is acknowledged that this conclusion should be treated with caution since income is a very sensitive issue and people often do not discuss it with strangers.

In relation to the population's migration type and the method of obtaining property in the squatter settlements, Table 5-3.3 reveals that the majority of all types of migration were indirect squatters (mainly buyers and tenants). However, the situation differs among the three settlements. For

example, the majority of rural- and all other cities- Phnom Penh migrants are direct squatters in the case of the East Preah Monivong bridge settlement in contrast to the rest of the studied settlements. The Chi-square test results in Table 5-3.3 reveal that there is a significant association between the two variables in the Bassac River, East Preah Monivong bridge and Boeng Kak settlements ($p = 0.001, 0.012$ and $0.016 < 0.05$).

Table 5-3.3: Methods of Obtaining Plots or Houses of the Studied Squatter Population by Type of Migrants

Method of obtaining property	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Rural-P.Penh	Other cities-P.Penh	Vietnamese immigra.	Rural-P.Penh	Other cities-P.Penh	Vietnamese immigra.	Rural-P.Penh	Other cities-P.Penh	Vietnamese immigra.
Direct squatting	13 18.5	2 2.9	0 0	14 20.0	4 5.7	8 11.4	11 15.7	1 1.4	0 0
Buying	12 17.1	3 4.3	13 18.6	6 8.6	0 0	19 27.1	31 44.3	7 10.0	0 0
Renting	11 15.7	0 0	13 18.5	2 2.9	0 0	1 1.4	11 15.7	0 0	0 0
Given free of charge	1 1.4	0 0	0 0	2 2.9	0 0	9 12.9	7 10.0	0 0	0 0
Looking after property (caretaker)	1 1.4	1 1.4	0 0	1 1.4	0 0	4 5.7	1 1.4	1 1.4	0 0
Total	38 54.3	6 8.6	26 37.1	25 35.7	4 5.7	41 58.6	61 87.1	9 12.9	0 0

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 50.31, p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 35.39, p = 0.01 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 30.33, p = 0.01 < 0.05$ - S.

In the case of Bassac River, none of the Vietnamese immigrant was direct squatter compared with rural- and other cities-Phnom Penh migrants. In the case of East Preah Monivong Bridge the direct squatters were shared by the three types of migrants. By calculating the relationship for each type of job of the population in the Boeng Kak settlement, we concluded that more rural-Phnom Penh migrants (11 out of 61) were direct squatters compared with the other cities-Phnom Penh migrants (1 out of 9).

In general, more Vietnamese immigrants are indirect squatters compared with rural- and other cities-Phnom Penh migrants. It is understandable that the Vietnamese immigrants tend to be indirect squatters since they are foreigners. It is also noticed that those Vietnamese immigrants who were direct squatters, as found in the East Preah Monivong Bridge settlement, were those who had lived in the area since they first arrived in Phnom Penh from Vietnam. The immigrants live on boats anchored along the banks of the river, which the authorities consider as illegal or squatting, rather than invade land like most of their Cambodian counterparts.

In relation to the population's migration status and the method of obtaining property in the squatter settlements, Table 5-3.4 reveals that the majority of all migrants - regardless of status - were indirect squatters (mainly buyers and tenants). However, like in the case of type of migration above, the situation differs among the three settlements. For example, the majority of long-term migrants were direct squatters in the East Preah Monivong bridge settlement in contrast to the rest of the studied settlements. The Chi-square test results in Table 5-3.4 reveal that there is no significant association between the method of obtaining property in the squatter settlements and the population's migration status in the case of the Bassac River settlement ($p = 0.26 > 0.05$).

Table 5-3.4: Methods of Obtaining Plots or Houses of the Studied Squatter Population by Status of Migrants

Method of obtaining property	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Long-term migrant	New migrant	Long-term migrant	New migrant	Long-term migrant	New migrant
Direct squatting	10 14.3	5 7.1	26 37.1	0 0	12 17.1	0 0
Buying	14 20.0	14 20.0	8 11.4	17 24.3	37 52.9	1 1.4
Renting	5 7.1	19 27.2	2 2.9	1 1.4	4 5.7	7 10.0
Given free of charge	0 0	1 1.4	0 0	11 15.7	6 8.6	1 1.4
Looking after property (caretaker)	0 0	2 2.9	0 0	5 7.1	1 1.4	1 1.4
Total	29 41.6	41 58.4	36 51.4	34 48.6	60 85.7	10 14.3

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 12.27$, $p = 0.26$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 48.91$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 40.56$, $p = 0.001 < 0.05$ - S.

However, the test results reveal that there is a significant association between the two variables in the case of the East Preah Monivong Bridge and Boeng Kak settlements (all $p = 0.001 < 0.05$). In both cases, more long-term migrants were direct squatters compared with new migrants. The finding that, in general, more long-term migrants are direct squatters compared with the new migrant population collaborates the argument of this study as stated in Chapter 1 that it is not the new migrants who invade land, but the long-term migrants who know the city very well. This is also in contrast to the situation in many squatter settlements in developing countries, as mentioned in Chapter 2, where the majority of squatters are new arrivals.

The reasons for this finding lie in the fact that, firstly, new migrants are unlikely to be land invaders since they have not stayed in the city long enough to get to know the situation and many of them

are occupied with the task of finding work in the city. As new migrants, they also lack the connections with the authorities that - in the case of Phnom Penh - is very important in being able to remain in the squatter settlements if they are not powerful, which they are not. Secondly, after the outbreak of squatting in 1993 there was no available land left to be invaded since both the authorities and the landowners became more vigilant in protecting their properties against invasion (Interviews with experienced professionals during and after the Fieldwork: 1996-1997).

In relation to the population's gender structure and the method of obtaining property in the squatter settlements, Table 5-3.5 reveals that the majority of both male and female migrants were indirect squatters (mainly buyers and tenants). However, like the two cases above, the situation differs among the three settlements. For example, the majority of male migrants were direct squatters in the case of the East Preah Monivong bridge settlement in contrast to the rest of the studied settlements. The Chi-square test results in Table 5-3.5 reveal that there is no significant association between the method of obtaining property in the squatter settlements and the population's migration status in the case of the Bassac River settlement ($p = 0.14 > 0.05$).

Table 5-3.5: Methods of Obtaining Plots or Houses of the Studied Squatter Population by Gender Structure

Method of obtaining property	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Male	Female	Male	Female	Male	Female
Direct squatting	6 8.6	9 12.9	24 34.3	2 2.9	7 10.0	5 7.1
Buying	13 18.6	15 21.4	5 7.1	20 28.6	13 18.6	25 35.7
Renting	10 14.3	14 20.0	2 2.9	1 1.4	3 4.3	8 11.4
Given free of charge	1 1.4	0 0	2 2.9	9 12.9	7 10.0	0 0
Looking after property (caretaker)	2 2.9	0 0	0 0	5 7.1	2 2.9	0 0
Total	32 45.7	38 54.3	33 47.1	37 52.9	32 45.7	38 54.3

Source: Compiled from the cross tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 8.30, p = 0.14 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 38.56, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 18.06, p = 0.003 < 0.05$ - S.

However, the test results reveal that there is a significant association between the two variables in the case of the East Preah Monivong Bridge and Boeng Kak settlements ($p = 0.001$ and $0.001 < 0.05$). In both cases, more members of the male population were direct squatters compared with the female population. In other words, in general, the male population tends to be direct squatters

compared with the female population. Although there seems to be a lack of studies on the gender of the squatter population in literature, in the case of Phnom Penh the reason for this finding lies in the fact that the female population is less involved in activities such as direct squatting or land grabbing, which normally involves physical strength and the ability to resist against all odds, including confrontation with the police.

In relation to the population's connections with relatives or friends in the squatter settlements and the method of obtaining property in the squatter settlements, Table 5-3.6 reveals that the majority of all migrants – both those who had and did not have relatives or friends in the squatter settlements - were indirect squatters (mainly buyers and tenants). However, like the cases above, the situation differs for the three settlements. For example, the majority of the population who had no relatives or friends are direct squatters in the case of the East Preah Monivong bridge settlement in contrast with the rest of the studied settlements. The Chi-square test results in Table 5-3.6 reveal that there is no significant association between the method of obtaining property in the squatter settlements and the population's connections with relatives or friends in the squatter settlements in the Bassac River and Boeng Kak settlements ($p = 0.176$ and $0.321 > 0.05$).

Table 5-3.6: Methods of Obtaining Plots or Houses of the Studied Squatter Population by Having Relative/Friend and Receiving Help/Information from Them

Method of obtaining property	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative/fr iend	Had relative/fr iend	Received help/infor mation	Had no relative/fr iend	Had relative/fr iend	Received help/infor mation	Had no relative/fr iend	Had relative/fr iend	Received help/infor mation
Direct squatting	4 5.7	11 15.7	11 15.7	9 12.9	17 24.3	17 24.3	1 1.4	11 15.7	8 11.4
Buying	2 2.9	26 37.1	25 35.7	1 1.4	24 34.3	24 34.3	4 5.7	34 48.6	33 47.1
Renting	0 0	24 34.3	24 34.3	0 0	3 4.3	1 1.4	0 0	11 15.7	11 15.7
Given free of charge	0 0	2 2.9	2 2.9	0 0	5 7.1	5 7.1	1 1.4	6 8.6	2 2.9
Looking after property (caretaker)	0 0	1 1.4	1 1.4	0 0	11 15.7	11 15.7	0 0	2 2.9	6 8.6
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 82.9	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test of the relationship between migration type and relatives/friends are presented as follows:

Bassac River: $\chi^2 = 11.19, p = 0.342 > 0.05$ -N.S.

East Pr. Monivong Bridge: $\chi^2 = 19.50, p = 0.034 < 0.05$ -S.

Boeng Kak: $\chi^2 = 14.20, p = 0.162 > 0.05$ - N.S.

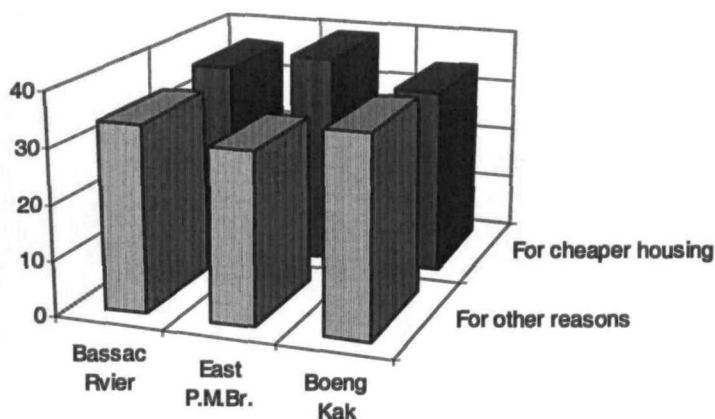
Yet, the test results reveal that there is a significant association between the two variables in the case of the East Preah Monivong Bridge settlement ($p = 0.001 < 0.05$). In the case of the East Preah Monivong Bridge settlement, more migrants who had no relatives or friends in the squatter settlement before their move were direct squatters compared with those who had relatives or friends. However, in general, there is no association between the method of obtaining property of the population and their connections with relatives or friends in the squatter settlements as illustrated by the Chi-square test results of the three settlements.

Therefore, unlike with migration to the city, in the case of squatting and especially indirect squatting, being well-connected with the place of destination and receiving help and information are to the way migrants obtain property in the areas. In other words, it does not matter how well the indirect squatters are connected and how much help they receive from the relatives or friends, they still buy or rent property in the squatter settlements. The information and help they receive therefore simply ease the settling process and perhaps influence the choice of squatter settlements, but has no impact on the way migrants obtain property. In addition, in the case of direct squatters, the connection plays no part in invading or squatting land since they establish the squatter settlements.

5.4 The Main Reason for Squatting or Living in the Studied Squatter Settlements

This section aims to answer the research question of what the main reason for squatting or living in a squatter settlement is and to test the hypothesis of this study of whether the main reason for squatting is because of other opportune reasons rather than a search for cheaper accommodation. The examination is carried out in terms of four important factors: type of job, income level, and type and status of migration. The reason for analysing the reasons for squatting according to these four factors is because they are widely known to have a great impact on the decision to squat or to live in squatter settlements¹. For example, the main reason for squatting among the poor, unemployed, rural-to-urban or new migrants is believed to be different from that of the rich, formally employed, urban-to-urban or long-term migrants.

Figure 5-4.1: Reasons for Squatting or Living in the Squatter Settlements of the Studied Squatter Population Type



Source: Compiled from the field survey (Sep., 1997- Jan., 1998)

In general, Figure 5-4.1 reveals that the majority of the studied population squatted or lived in the squatter settlements for cheaper housing. This is the same for all three studied squatter settlements. This early finding seems to corroborate with the literature on squatter settlements in most developing countries, as discussed in Chapter 2, that the majority of squatters squat because of the search for cheaper accommodation. In other words, people squat or move to squatter settlements because house prices or rent are cheaper there compared to the rest of the city.

¹See the full discussion in chapters 1 and 2

In the following discussions the reasons for squatting or living in the squatter settlements are divided into two main categories that are based on the similarity of the reasons obtained from the interviewees (the seven reasons shown in the tables below were summarised from the more than ten reasons obtained during the Fieldwork: 1996-1997). This is done to enable an analysis of the data.

The reason of squatting or living in squatter settlements for other opportune reasons is irrelevant to the affordability or availability of accommodation in the legal settlements of the city or the search for cheaper housing. This refers to those who squatted or lived in the squatter settlements simply because the land was empty and available for them to live on, despite the fact that it was not their property. It also incorporates those who squatted or lived in the squatter settlements because it is close to the river, where they can fish or grow vegetables, and to the market, where the produce can be sold immediately. In this case, if the land was far from the river and market, perhaps these squatters would not have invaded it since they cannot work the land, although it might have been squatted by others who do not work the land for a living.

In relation to the population's type of employment, Table 5-4.1 reveals that the majority of unemployed and the informal workers squatted or lived in the squatter settlements for cheaper housing, while the majority of formal workers did for reasons other than the search for cheaper housing. However, the situation differs among the three studied squatter settlements. For example, the majority of informal workers squatted or lived in the squatter settlement for reasons other than the search for cheaper housing in the case of East Preah Monivong Bridge in contrast to the rest of the studied settlement cases. This finding seems to corroborate with the literature, as discussed in Chapter 2, that the poor - which in the literature include the unemployed and informal workers - squat because they cannot afford prices in the legal housing markets.

However, this study earlier finding in Chapter 4 reveals that the income of the informal workers is not necessary lower than that of the formal workers. Yet, this finding should be treated with caution since, as mentioned earlier, the salaries of the majority of the formal workers and especially the government employees are often much higher as a result of bribes or a second income. The researcher is also unable to collect information on these respondents' true income since they obviously do not want to expose such activities. The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the type of employment

of the population in Table 5-4.1 reveal that there is a significant association between the two variables in all the squatter settlements (all $p < 0.05$).

Table 5-4.1: The Reasons for Moving to the Studied Squatter Settlement of the Studied Population by Type of Job

Reason for moving to the settlements	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Unempl oyed	Informa l worker	Formal worker	Unempl oyed	Informa l worker	Formal worker	Unempl oyed	Informa l worker	Formal worker
Cheaper place to live compared with other areas	4 5.7	28 40.0	4 5.7	2 2.9	25 35.7	9 12.9	7 10.0	16 22.9	13 18.6
Sub-total of other reasons as follows:	3 4.3	24 34.3	7 10.0	0 0	26 37.1	8 11.4	5 7.1	11 15.7	18 25.7
Want to own property	0 0	0 0	0 0	0 0	0 0	2 2.9	0 0	1 1.4	6 8.6
Received free of charge from relatives or friends, or offered free accommodation	2 2.9	0 0	1 1.4	0 0	0 0	3 4.3	2 2.9	0 0	7 10.0
Close to workplace/river and market	1 1.4	14 20.0	2 2.9	0 0	22 31.4	1 1.4	2 2.9	2 2.9	2 2.9
Land was available to settle down on	0 0	8 11.4	3 4.3	0 0	4 5.7	2 2.9	1 1.4	6 8.6	4 5.7
Looking after property (caretaker)	0 0	2 2.9	0 0	0 0	0 0	0 0	0 0	2 2.9	0 0
Other	0 0	0 0	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0
Total	7 10.0	52 74.3	11 15.7	2 2.9	51 72.9	17 24.3	12 17.1	27 38.6	31 44.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 102.76$, $p = 0.001 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 100.23$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 55.10$, $p = 0.02 < 0.05$ - S.

In both the Bassac River and Boeng Kak settlements more unemployed (4 out of 7 and 7 out of 12) and informal workers (28 out of 52 and 16 out of 27) squatted or lived in squatter settlements for cheaper housing compared with the formal workers. In the case of the East Preah Monivong Bridge settlement, more unemployed (all 2) and formal workers (9 out of 17) squatted or lived in squatter settlements for cheaper housing compared with the informal workers. In general, more unemployed and informal workers squatted or lived in the squatter settlements for cheaper housing compared with the formal workers. It is therefore logical that more unemployed, who technically have no income, and informal workers (although their level of income is arguable) seek cheaper accommodation in the city compared with the formal workers, whose level of income in some cases is also arguable.

In relation to the population's level of employment, Table 5-4.2 reveals that the majority of the low- and high-income groups squatted or lived in squatter settlements for cheaper housing, while the majority of middle-income respondents did so for reasons other than the search for cheaper

housing. However, like the case above, the situation differs among the three studied squatter settlements. For example, the majority of the high-income respondents squatted or lived in the squatter settlement for reasons other than the search for cheaper housing in the case of East Preah Monivong Bridge in contrast to the rest of the studied settlements. On the one hand, this finding seems to corroborate with the literature, as discussed in Chapter 2, that the poor squat because they cannot afford legal housing.

Table 5-4.2: The Reasons for Moving to the Studied Squatter Settlement of the Studied Population by Level of Income

Reason for moving to the settlements	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
Cheaper place to live compared with other areas	27 38.6	3 4.3	6 8.6	14 20.0	8 11.4	14 20.0	26 37.2	5 7.1	5 7.1
Sub-total of other reasons as follows:	31 44.3	3 4.3	0 0	9 12.9	7 10.0	18 25.7	15 21.4	16 22.9	3 4.3
Want to own property	0 0	0 0	0 0	0 0	2 2.9	0 0	1 1.4	3 4.3	3 4.3
Received free of charge from relatives or friends, or offered free accommodation	2 2.9	1 1.4	0 0	0 0	3 4.3	0 0	2 2.9	6 8.6	0 0
Close to workplace/river and market	16 22.8	1 1.4	0 0	4 5.7	1 1.4	18 25.7	3 4.3	3 4.3	0 0
Land was available to settle down on	10 14.3	1 1.4	0 0	5 7.1	1 1.4	0 0	7 10.0	4 5.7	0 0
Looking after property (caretaker)	2 2.9	0 0	0 0	0 0	0 0	0 0	2 2.9	0 0	0 0
Other	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Total	58 60.0	6 8.6	6 8.6	23 32.9	15 21.4	32 45.7	41 58.6	21 30.0	8 11.4

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 45.37, p = 0.25 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 77.21, p = 0.007 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 102.40, p = 0.001 < 0.05$ - S.

On the other hand, the finding that the majority of high-income respondents squatted or lived in the squatter settlements for cheaper housing contradicts the literature. However, as discussed in Section 4-3, the high-income population includes the young Vietnamese immigrants, who want to save as much as they can for their remittances to Vietnam. These young, single women are also not homeowners, but are only tenants. Thus, they have not made substantial investments in housing that can be lost in the case of squatter eviction. In contrast, they utilise the advantages of living in cheap, rented housing in squatter settlements.

The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the level of income of the population, as shown in Table 5-4.2, reveal that

there is no significant association between the two variables in the case of the Bassac River squatter settlement ($p = 0.25 > 0.05$). However, the test results reveal that there is a significant association between the two variables in the East Preah Monivong Bridge and Boeng Kak settlements ($p = 0.007$ and $0.001 < 0.05$). In the East Preah Monivong Bridge settlement, more members of the low- and middle-income populations squatted or lived in squatter settlements for cheaper housing compared with the high-income group. In the Boeng Kak settlement, more members of the low- and high-income groups squatted or lived in squatter settlements for cheaper housing compared with the middle-income population. In general, more members of the low-income population squatted or lived in the squatter settlements for cheaper housing compared with the rest of the income groups.

It is difficult to draw a conclusion from this finding since the information on income and types of jobs received from the studied population could have been distorted. It is noticed that the unemployed could have higher incomes than government employees do if they have relatives or family abroad who support them. The population often keeps their true income - from sources other than their salaries – secret as they regard it as a private matter. However, to be fair to the interviewees, the study should conclude that it is logic that more members of the low-income population of the studied squatter settlements cannot afford legal housing and thus squat or live in squatter settlements than the rest of the income groups.

In relation to the population' migration type, Table 5-4.3 reveals that in general, the majority of rural- and other cities- Phnom Penh migrants squatted or lived in the squatter settlements for cheaper housing, while surprisingly the majority of the Vietnamese immigrants squatted or lived in the squatter settlements for reasons other than searching for cheaper housing. However, there is a different picture among the three studied squatter settlements. For example, the majority of rural- Phnom Penh migrants squatted or lived in the squatter settlement for cheaper housing in the case of Boeng Kak settlement in contrast to the rest of the studied settlement cases. It is acknowledged that the finding above is a bit of a surprised to the researcher as mentioned early the Vietnamese immigrants were expected to dominate the reason for cheaper housing.

However, this result could be explained that most of the Vietnamese immigrants especially in the East Preah Monivong Bridge where they squatted or lived in the squatter settlement for reasons

other than seeking for cheaper housing, are those who have settled there as early as 1979. In that early time, the favourite location of the area of being close to the river and market was their main reason to settle in the area rather than the search for cheaper housing (as for example, Mr. Ngeang Kou Tach, Fieldwork: 1996-1997). In the case of the rural- and other cities-Phnom Penh migrants, there are two possible reasons behind the finding. First, if these population are the long-term migrants it is very likely that most if not all of them used to own houses some where else but their houses were sold and move into the squatter settlements for cheaper places to live. Secondly, if they are the new migrants, they have a good reason to live in the squatter settlements since the properties price and rents in the areas are cheaper compared to the legal markets.

Table 5-4.3: The Reasons for Moving into the Studied Squatter Settlement of the Studied Population by Migration Type

Reason for moving to the settlements	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Rural-P.Penh migrant	Other cities-P.Penh migrant	Vietna mese immigrant	Rural-P.Penh migrant	Other cities-P.Penh migrant	Vietna mese immigrant	Rural-P.Penh migrant	Other cities-P.Penh migrant	Vietna mese immigrant
Cheaper place to live compared with other areas	20 28.6	2 2.9	14 20.0	13 18.5	4 5.7	19 27.1	29 41.4	5 7.1	0 0
Sub-total of other reasons as follows:	18 25.7	4 5.7	12 17.1	12 17.1	0 0	22 31.4	30 42.8	4 5.7	0 0
Want to own property	0 0	0 0	0 0	2 2.9	0 0	0 0	7 10.0	0 0	0 0
Received free of charge from relatives or friends, or offered free accommodation	3 4.3	0 0	0 0	3 4.3	0 0	0 0	8 11.4	0 0	0 0
Close to workplace /river and market	5 7.1	0 0	12 17.1	2 2.9	0 0	21 30.0	6 8.6	0 0	0 0
Land was available to settle down on	8 11.4	3 4.3	0 0	5 7.1	0 0	1 1.4	8 11.4	3 4.3	0 0
Looking after property (caretaker)	1 1.4	1 1.4	0 0	0 0	0 0	0 0	1 1.4	1 1.4	0 0
Other	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Total	38 54.3	6 8.6	26 37.1	25 35.7	4 5.7	41 58.6	61 87.1	9 12.9	0 0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 62.84$, $p = 0.01 < 0.05$ - S.

East Preah Monivong Bridge settlement: $\chi^2 = 140.82$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 44.63$, $p = 0.01 < 0.05$ - S.

The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the population' migration type in Table 5-4.1 reveal that there is a significant association between the two variables in all cases of the squatter settlements (all $p < 0.05$). In both cases of Bassac River settlement, more rural-Phnom Penh and the Vietnamese immigrants squatted or lived in the squatter settlements for cheaper housing compared to the other cities-Phnom Penh migrants. In the cases of East Preah Monivong Bridge settlement, more rural-

and other cities- Phnom Penh migrants tend to squatted or lived in the squatter settlements for cheaper housing compared to the Vietnamese immigrants. While in the case of Boeng Kak settlement, more rural-Phnom Penh migrants squatted or lived in the squatter settlements for cheaper housing compared to the other cities-Phnom Penh migrants. In short, there is a significant association between the reasons for squatting or living in the squatter settlements and the population' migration type among the three studied settlements with different cases as explained above.

In relation to the population's migration status, Table 5-4.4 reveals that the majority of new migrants squatted or lived in the squatter settlements for cheaper housing, while the majority of long-term migrants did so for reasons other than the search for cheaper housing. This is the case in all three studied squatter settlements. This finding seems to corroborate with the literature, as discussed in Chapter 2, that the poor and often new migrants squat because they cannot afford legal housing. It also supports our earlier finding that the majority of the rural-Phnom Penh and other cities-Phnom Penh migrants who squat or live in squatter settlements for cheaper housing are in fact new migrants and Vietnamese immigrants, while those who squat or live in squatter settlements for other reasons are the long-term migrants.

The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the population's migration status in Table 5-4.4 reveal that there is no significant association between the two variables in the case of the Bassac River squatter settlement ($p = 0.19 > 0.05$). However, the test results reveal that there is a significant association between the two variables in the East Preah Monivong Bridge and Boeng Kak settlements (all $p = 0.001 < 0.05$). In both the East Preah Monivong Bridge and Boeng Kak settlements, more members of the new migrant population squatted or lived in the squatter settlements for cheaper housing compared with the long-term migrant population. As discussed earlier, it is reasonable for new migrants to squat or live in squatter settlements, since property prices in the city have increased dramatically since the end of 1991. The new migrants therefore have no alternative but to seek shelter in the squatter settlements, where property prices are lower compared with the legal property market of the city.

Table 5-4.4: The Reasons for Moving to the Studied Squatter Settlement of the Studied Population by Status of Migration

Reason for moving to the settlements	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Long-term migrant	New migrant	Long-term migrant	New migrant	Long-term migrant	New migrant
Cheaper place to live compared with other areas	13 18.5	23 32.8	16 22.9	20 28.6	29 41.4	7 10.0
Sub-total of other reasons as follows:	16 22.9	18 25.7	20 28.6	14 20.0	31 44.3	3 4.3
Want to own property	0 0	0 0	2 2.9	0 0	7 10.0	0 0
Received free of charge from relatives or friends, or offered free accommodation	2 2.9	1 1.4	3 4.3	0 0	7 10.0	1 1.4
Close to workplace/river and market	8 11.4	9 12.9	9 12.9	14 20.0	5 7.1	1 1.4
Land was available to settle down on	4 5.7	5 7.1	6 8.6	0 0	11 15.7	0 0
Looking after property (caretaker)	2 2.9	2 2.9	0 0	0 0	1 1.4	1 1.4
Other	0 0	1 1.4	0 0	0 0	0 0	0 0
Total	29 41.4	41 58.6	36 51.4	34 48.6	60 85.7	10 14.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 25.14$, $p = 0.19 > 0.05$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 44.10$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 45.26$, $p = 0.001 < 0.05$ - S.

In relation to the population's gender structure, Table 5-4.5 reveals that the majority of both the male and female populations squatted or lived in the squatter settlements for cheaper housing. However, the situation differs among the three studied squatter settlements. For example, the majority of the female population squatted or lived in the squatter settlement for cheaper housing in the case of East Preah Monivong Bridge in contrast to the other studied settlements. It is reasonable that the gender structure of the population is irrelevant to the reason for squatting or living in the studied squatter settlements. The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the population's gender structure in Table 5-4.5 reveal that there is no significant association between the two variables in the Bassac River settlement ($p = 0.701 > 0.05$).

However, the test results also reveal that there is a significant association between the two variables in the East Preah Monivong Bridge and Boeng Kak settlements (all $p < 0.05$). In the case of the East Preah Monivong Bridge settlement, more members of the female population squatted or lived in squatter settlements for other reasons than the search for cheaper housing compared with the male population. In the case of the Boeng Kak settlement, more members of the female population squatted or lived in squatter settlements for cheaper housing compared with the male population. In

general, more female population squatted or lived in squatter settlements for cheaper housing compared with the male population. As in the cases above, the explanation for this lies in the fact that the majority of the female population are new, young, Vietnamese immigrants. In the case of Cambodian women, they are the heads of the household. They moved to squatter areas in search of affordable accommodation to thereby reduce the burden of supporting their families (Informal interviews with respondents: 1996-1997).

Table 5-4.5: The Reasons for Moving to the Studied Squatter Settlements of the Studied Population by Gender Structure

Reason for moving to the settlements	Bassac River		East Preah Monivong Bridge		Boeng Kak	
	Male	Female	Male	Female	Male	Female
Cheaper place to live compared with other areas	16 22.9	20 28.6	18 25.7	18 25.7	16 22.9	20 28.6
Sub-total of other reasons as follows:	16 22.9	18 25.7	15 21.4	19 27.1	16 22.9	18 25.7
Want to own property	0 0	0 0	2 2.9	0 0	0 0	7 10.0
Received free of charge from relatives or friends, or offered free accommodation	2 2.9	1 1.4	3 4.3	0 0	7 10.0	1 1.4
Close to workplace/river and market	6 8.6	11 15.7	4 5.7	19 27.1	1 1.4	5 7.1
Land was available to settle down on	6 8.6	5 7.1	6 8.6	0 0	6 8.6	5 7.1
Looking after property (caretaker)	2 2.9	0 0	0 0	0 0	2 2.9	0 0
Other	0 0	1 1.4	0 0	0 0	0 0	0 0
Total	32 45.7	38 54.3	33 47.1	37 52.9	32 45.7	38 54.3

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 7.25$, $p = 0.701 > 0.05$ - N.S.

East Preah Monivong Bridge settlement : $\chi^2 = 30.62$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 23.79$, $p = 0.004 < 0.05$ - S.

In relation to the population's age structure, Table 5-4.6 reveals that the majority of the age groups 16 to 25 and 36 to 49 squatted or lived in squatter settlements for cheaper housing, while the majority of the age groups 26 to 35 and 50 to 70 did so for reasons other than the search for cheaper housing. However, the situation differs among the three studied squatter settlements. The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the population's age structure in Table 5-4.6 reveal that there is no significant association between the two variables in the Bassac River settlement ($p = 0.062 > 0.05$). However, the test results also reveal that there is a significant association between the two variables in the East Preah Monivong Bridge and Boeng Kak squatter settlements (all $p < 0.05$).

In the case of the East Preah Monivong Bridge settlement, more population aged between 16 to 25, 36 to 49 and 50 to 70 squatted or lived in squatter settlements for cheaper housing compared with the age group 26 to 35. In the case of the Boeng Kak settlement, more population aged between 36 to 49 squatted or lived in squatter settlements for cheaper housing compared with the age groups 16 to 25, 26 to 35 and 50 to 70. In general, more population aged between 36 to 49 squatted or lived in squatter settlements for cheaper housing compared with the age groups 16 to 25, 26 to 35 and 50 to 70. It is difficult to establish a reason why particular age groups tend to squat or live in the squatter settlements for different purposes and further study is needed on this matter and thus further study is needed.

Table 5-4.6: The Reasons for Moving to the Studied Squatter Settlements of the Studied Population by Age Structure

Reason for moving to the settlements	Bassac River				East Preah Monivong				Boeng Kak			
	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70	16-25	26-35	36-49	50-70
Cheaper place to live compared with other areas	7 10.0	10 14.3	16 22.9	3 4.3	15 21.4	1 1.4	18 25.7	2 2.9	7 10.0	14 20.0	11 15.7	4 5.7
Sub-total of other reasons as follows:	3 4.3	14 20.0	9 12.9	8 11.4	12 17.1	15 21.4	6 8.6	1 1.4	8 11.4	14 20.0	4 5.7	8 11.4
Want to own property	0 0	0 0	0 0	0 0	0 0	2 2.9	0 0	0 0	6 8.6	1 1.4	0 0	0 0
Received free of charge from relatives or friends, or offered free accommodation	1 1.4	1 1.4	0 0	1 1.4	0 0	2 2.9	1 1.4	0 0	1 1.4	6 8.6	0 0	1 1.4
Close to workplace/river and market	1 1.4	8 11.4	6 8.6	2 2.9	12 17.1	9 12.9	2 2.9	0 0	1 1.4	3 4.3	1 1.4	1 1.4
Land was available to settle down on	0 0	3 4.3	3 4.3	5 7.1	0 0	2 2.9	3 4.3	1 1.4	0 0	2 2.9	3 4.3	6 8.6
Looking after property (caretaker)	0 0	2 2.9	0 0	0 0	0 0	0 0	0 0	0 0	0 0	2 2.9	0 0	0 0
Other	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Total	10 14.3	24 34.3	25 35.7	11 15.7	27 38.6	16 22.9	24 34.3	3 4.3	15 21.4	28 40.0	15 21.4	12 17.1

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 42.68, p = 0.062 > 0.05$ - N.S.

East Preah Monivong Bridge settlement: $\chi^2 = 58.53, p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 63.86, p = 0.001 < 0.05$ - S.

In relation to the population's connections with relatives or friends in the settlements before their move, Table 5-4.7 reveals that the majority of those who had relatives or friends in the settlements before their move squatted or lived in the squatter settlements for cheaper housing, while the majority of those who had no connections squatted or lived in the squatter settlements for reasons other than the search for cheaper housing. This is true in all three studied squatter settlements. The examination of the relationship between the two variables is done to establish whether the connections between the potential squatters and their relatives or friends who live in and have

experienced of the squatter settlements influence the decision to squat or to live in the squatter settlements. In this case, it does seem to have an impact.

However, the Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the population's connections with their relatives or friends in the squatter settlements before their move in Table 5-4.7 reveal that there is only one settlement where there is a significant association between the two variables – the East Preah Monivong Bridge settlement ($p = 0.001 < 0.05$). In this case, more population who had relatives or friends living in the squatter settlement before their move squatted or lived in squatter settlements for cheaper housing compared with those who had no connections in the settlement. In general, though, there is no significant association between the two variables in the total studied population. In other words, whether migrants had or did not have relatives or friends in the squatter settlements is irrelevant to the squatter population's reasons for squatting or to living in the squatter settlements. It is quite understandable that such a connection is irrelevant to the reason for squatting or living in squatter settlements unless those relatives or friends can provide the migrants with cheaper or free accommodation in the squatter settlements. However, according to our data in Table 5-4.7, that is not the case in this study.

Table 5-4.7: The Reasons for Moving to the Studied Squatter Settlements by Whether Migrants Has/Did Not Have Relatives/Friends and Received Help/Information

Reason for moving to the settlements	Bassac River			East Preah Monivong Bridge			Boeng Kak		
	Had no relative /friend	Had relative /friend	Received help/info	Had no relative /friend	Had relative /friend	Received help /info.	Had no relative /friend	Had relative /friend	Received help /info.
Cheaper place to live compared with other areas	2 2.9	34 48.6	33 47.1	1 1.4	35 50.0	33 47.1	2 2.9	34 48.6	30 42.9
Sub-total of other reasons as follows:	4 5.7	30 42.9	30 42.9	9 12.9	25 35.7	25 35.7	4 5.7	30 42.9	30 42.9
Want to own property	0 0	0 0	0 0	0 0	2 2.9	2 2.9	0 0	7 10.0	7 10.0
Received free of charge from relatives or friends, or offered free accommodation	1 1.4	2 2.9	2 2.9	3 4.3	0 0	0 0	1 1.4	7 10.0	7 10.0
Close to workplace/river and market	1 1.4	16 22.9	16 22.9	0 0	23 32.9	23 32.9	1 1.4	5 7.1	5 7.1
Land was available to settle down on	2 2.9	9 12.9	9 12.9	6 8.6	0 0	0 0	2 2.9	9 12.9	9 12.9
Looking after property (caretaker)	0 0	2 2.9	2 2.9	0 0	0 0	0 0	0 0	2 2.9	2 2.9
Other	0 0	1 1.4	1 1.4	0 0	0 0	0 0	0 0	0 0	0 0
Total:	6 8.6	64 91.4	63 90.0	10 14.3	60 85.7	58 82.9	6 8.6	64 91.4	60 85.7

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test between the reasons for moving into the squatter settlements and whether migrants had or did not have relatives or friends in the settlements before their move are presented as follows:

Bassac River: $\chi^2 = 26.69$, $p = 0.144 > 0.05$ - N.S.

East Pr. Monivong Bridge: $\chi^2 = 82.71$, $p = 0.001 < 0.05$ - S.

Boeng Kak: $\chi^2 = 23.54$, $p = 0.171 > 0.05$ - N.S.

Table 5-4.8 reveals that the majority of the indirect squatters squatted or lived in the squatter settlements for cheaper housing, while the majority of the direct squatters squatted or lived in the squatter settlements for reasons other than the search for cheaper housing. However, the situation differs among the three studied squatter settlements. This confirms our earlier conclusion that in the case of Phnom Penh, the direct squatters - who are the government employees - seem to squat the land because they have the opportunity to do so rather than because they cannot afford legal housing.

The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the method of obtaining property in the squatter in Table 5-4.8 reveal that there is a significant association between the two variables in all areas (all $p = 0.001 < 0.05$). More direct squatters of the Bassac River and East Preah Monivong Bridge squatted or lived in the squatter settlements for cheaper housing compared with the indirect squatters. In contrast, in the case of the Boeng Kak settlement, more indirect squatters squatted or lived in the squatter settlements for cheaper housing compared with the direct squatters. In general, thus, more direct squatters squatted or lived in the squatter settlements for cheaper housing compared with the indirect squatters.

This finding could perhaps could be explained in that most of the direct squatters are low ranking government employees and civilians. They are poor compared with the minority of the direct squatters who grabbed larger plots than they did in the squatter settlements. This is because many of the big land grabbers have either already sold their squatted plots to indirect squatters, or rent out their squatter properties and reside outside the squatter settlements. Of course, in the case of the indirect squatters, many of the reasons relate to economic factors. However, they dare to squat because they know that they have less of a chance to be evicted due to their position in society and their connections with the authorities. It is doubtful that this population would have squatted if authorities. It is doubtful whether this population would have squatted if this was not the case. Section 5-5 will testify to this argument when the slum settlers are cross-examined. In summary, many of both the direct and indirect squatters are the opportunists. In other words, the situation differs among individual squatters.

Table 5-4.8: The Reasons for Moving to the Studied Squatter Settlements by the Methods of Obtaining Property in the Settlements

Reasons for moving to the settlements	Bassac River						East Preah Monivong Bridge						Boeng Kak					
	Direct squatting	Buying	Renting	Looking after property (caretaker)	Received free of charge		Direct squatting	Buying	Renting	Looking after property (caretaker)	Received free of charge		Direct squatting	Buying	Renting	Looking after property (caretaker)	Received free of charge	
Cheaper place to live	5 7.1	15 21.5	16 22.9	0 0	0 0		12 17.1	12 17.1	2 2.9	2 2.9	8 11.4		6 8.6	21 30.0	9 12.9	0 0	0 0	
Sub-total of other reasons	10 14.3	13 18.6	8 11.4	2 2.9	1 1.4		14 20.0	13 19.6	1 1.4	3 4.3	3 4.3		6 8.6	17 24.3	2 2.9	2 2.9	7 10.0	
Wanted to own property	0	0	0	0	0		0	2	0	0	0		0	7	0	0	0	
Received free of charge	2 2.9	0	0	0	1 1.4		3 4.3	0	0	0	0		1 1.4	0	0	0	0	
Close to workplace, river/market	2 2.9	8 11.4	7 10.0	0 0	0 0		5 7.1	11 15.7	1 1.4	3 4.3	3 4.3		1 1.4	3 4.3	0 0	0 0	0 0	
Land was available/empty to settle on	6 8.6	5 7.1	0 0	0 0	0 0		6 8.6	0	0	0	0		4 5.7	7 10.0	2 2.9	0 0	0 0	
Looking after property (caretaker)	0	0	0	2 2.9	0 0		0	0	0	3 4.3	0 0		0	0	0	2 2.9	0 0	
Other reasons	0	0	1 1.4	0 0	0 0		0	0	0	0	0		0	0	0	0	0	
Total	15 21.4	28 40.0	24 34.3	2 2.9	1 1.4		26 37.1	25 35.7	3 4.3	5 7.1	11 15.7		12 17.1	38 54.3	11 15.7	2 2.9	7 10.0	

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as follows:

Bassac River settlement: $\chi^2 = 174.33$, $p = 0.001 < 0.05$ - S.

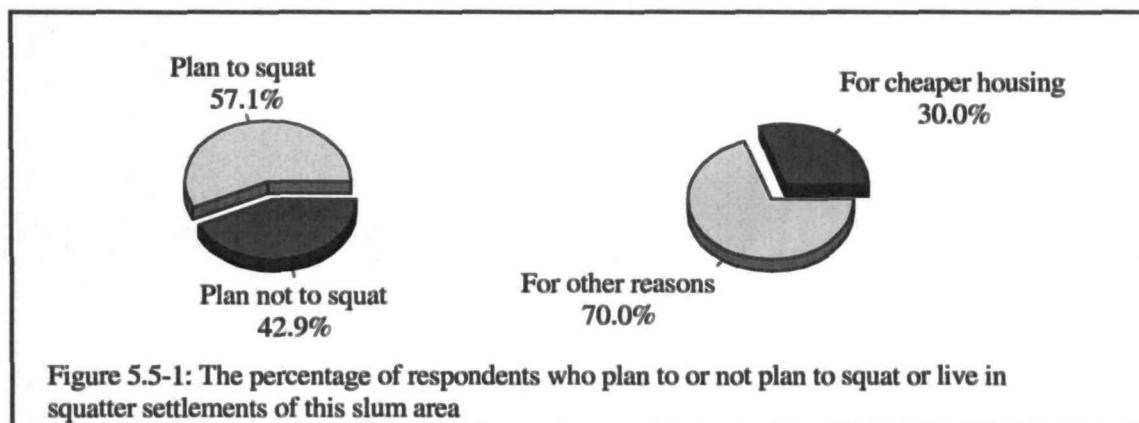
East Preah Monivong Bridge settlement: $\chi^2 = 174.33$, $p = 0.001 < 0.05$ - S.

Boeng Kak settlement: $\chi^2 = 175.38$, $p = 0.001 < 0.05$ - S.

5-5 The Reasons for Planning to Squat of the Studied Slum Population and the Planned Method of Doing so:

This section aims to establish the reasons for planning or considering to squat of the studied slum population as they are in no better position than their squatter counterparts in terms of physical living conditions, jobs, income, type and status of migration. It also examines the planned methods of obtaining land or houses in squatter settlements of those who plan to squat in future, and the reasons for planning not to squat of the rest of the population of this area. An examination of these issues and a comparison with the findings of similar examinations on squatter settlements aims to crosscheck the reasons for squatting. This will also show, or add to, the evidence on whether people want to squat or live in the squatter settlements for cheaper accommodation or for other opportune reasons.

As before, the study proceeds by examining the issue in relation to four factors: job, income, and type and status of migration of the studied population. According to Figure 5-5.1, there are 40 respondents (57.1 per cent) who want to squat in future and the remaining 30 respondents (42.9 per cent) of the total of 70 (100.0 per cent) interviewees of the Boeng Salang slum settlement do not plan to squat at all.



- The Reason for Planning to Squat:

In order to make the data analytical this study classifies the more than five reasons into two main categories of reasons for wanting to squat or live in squatter settlements, based on relevant factors in the responses obtained from the respondents. According to Figure 5-5.1, the first reason of wanting to escape overcrowded conditions and the search for cheaper property can be regarded as

a desperate need for cheaper accommodation if these respondents squat in future. This is because all of these respondents imply that they could not afford house prices in the legal parts of the city if they ever wanted to move from this slum settlement. The remaining three reasons indicate other opportune reasons for squatting rather than a desperate need for cheaper accommodation, as shown in Table 5-5.1 below.

In general, Table 5-5.1 reveals that the majority of both the formal and informal workers want to squat or live in the squatter settlements for reasons other than escaping poor housing conditions. The Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements and the type of employment of the population in Table 5-5.1 reveal that there is a significant association between the two variables ($p = 0.001 < 0.05$). In addition, more formal workers (9 out of 28 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the informal workers (3 out of 12).

Table 5-5.1: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement's Studied Population by Types of Jobs

Reasons for moving to the settlements	Informal		Formal		Total	
	No.	%	No.	%	No.	%
Wants to escape existing overcrowded conditions and for cheaper housing	3	7.5	9	22.5	12	30.0
Other reasons as follows:	9	22.5	19	47.5	28	70.0
Wants to own property	9	22.5	7	17.5	16	40.0
Wants to sell existing house for reasons relating to family	0	0	7	17.5	7	17.5
Wants to give the existing house to children	0	0	5	12.5	5	12.5
Total	12	30.0	28	70.0	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997-Jan., 1998)

Note: The result of Chi-square test are presented as: $\chi^2 = 29.87$, $p = 0.001 < 0.05$ - S.

This finding seems to contradict our earlier one that the informal workers tend to squat or live in the squatter settlements for cheaper housing. However, as Table 5-5.1 shows, both the informal and formal workers are represented in almost equal numbers in the two main reasons. In addition, the number of slum respondents who want to squat or live in the squatter settlements are also smaller than those of the three squatter settlements (40 to 210 respondents). Furthermore, this finding is also due to the fact that unlike most formal workers of the squatter population who are powerful civil servants and military and police officials, the formal workers in the slum settlement are low-ranking civil servants such as primary and secondary school teachers (Fieldwork: 1996-1997).

Thus, even though most of them want to escape their existing crowded living conditions they cannot afford to do so in the legal housing markets. In other words, the nature of the work categories of the slum population are different from those of the squatter population, which differentiate the result of this finding from that of the squatter population. In this regard, our earlier finding should not be affected by the result obtained from the slum population.

In relation to the studied slum population's income, Table 5-5.2 reveals that, like the case above, the majority of both the low- and middle-income populations want to squat or live in the squatter settlements for reasons other than escaping their existing poor housing conditions. The Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements and the level of income of the population in Table 5-5.2 reveal that there is a significant association between the two variables ($p = 0.014 < 0.05$). In addition, more middle-income population (9 out of 28 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the low-income population (3 out of 12).

Table 5.5-2: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement's Studied Population by Level of Income

Reason for moving to the settlements	Low income		Middle income		Total	
	No.	%	No.	%	No.	%
Wants to escape existing overcrowded conditions	3	7.5	9	22.5	12	30.0
Other reasons as follows:	9	22.5	19	47.5	28	70.0
Want to own property	9	22.5	7	17.5	16	40.0
Wants to sell existing house for reason relating to family	0	0	7	17.5	7	17.5
Wants to give the existing house to children	0	0	5	12.5	5	12.5
Total	12	30.0	28	70.0	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997-Jan., 1998)

Note: The result of Chi-square test are presented as: $\chi^2 = 10.53$, $p = 0.014 < 0.05$ - S.

As in the case above, this finding seems to contradict our earlier one that the low-income squatters tend to squat or live in the squatter settlements for cheaper housing. Again, as Table 5-5.2 shows, both the low- and middle-income populations are represented in almost equal numbers in the two main reasons. In addition, the number of respondents in the slum population who want to squat or live in the squatter settlements is also smaller than those of the three squatter settlements (40 to 210 respondents). Furthermore, the fact that there is no high-income population in this slum population sample could make a comparison difficult in the sense that two of the squatter settlements' population samples entail high-income populations. Therefore, due to these reasons, our earlier finding should not be affected by the result obtained from the slum population. Yet, it is evident that

the informal workers in the slum settlement differ from those of the squatter population in that they have different levels of incomes although they do the same work.

In relation to the studied slum population's migration type, Table 5-5.3 reveals that the majority of the rural-Phnom Penh migrant population want to squat or live in the squatter settlements for reasons other than escaping their existing poor housing conditions. Other cities-Phnom Penh migrants are equally represented in the two main reasons. The Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements and the population's migration type in Table 5-5.3 reveal that there is a significant association between the two variables ($p = 0.002 < 0.05$). In this case, more other cities-Phnom Penh migrant population (2 out of 4 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the rural-Phnom Penh migrant population (10 out of 36).

Table 5-5.3: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement Studied Population by Types of Migration

Reasons for moving into the settlements	Rural-P. Penh		Other cities-P. Penh		Total	
	No.	%	No.	%	No.	%
Wants to escape existing overcrowded conditions	10	25.0	2	5.0	12	30.0
Other reasons as follows:	26	65.0	2	5.0	13	70.0
Wants to own property	14	35.0	2	5.0	13	32.5
Wants to sell existing house for reason related to family	7	17.5	0	0	7	17.5
Wants to give the existing house to children	5	12.5	0	0	5	12.5
Total	36	90.0	4	10.0	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997-Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 25.53$, $p = 0.002 < 0.05$ - S.

Although this finding seems to support our earlier one in the case of the squatter population, it must be treated with caution due to other weaknesses in the study. As in the two cases above, this comparison is difficult since there is no Vietnamese immigrant population in this slum population sample, while two of the squatter settlements' population samples entail Vietnamese populations. Again, as Table 5-5.2 shows, despite the significant result, both the low- and middle-income populations are represented in almost equal numbers in the two main reasons. In addition, the number of our sample for the slum population who want to squat or live in the squatter settlements is also smaller than those of the three squatter settlements (40 to 210 respondents).

In relation to the studied slum population's migration status, Table 5-5.4 reveals that the majority of both the long-term and new migrant populations want to squat or live in the squatter settlements for reasons other than escaping their existing poor housing conditions. The Chi-square test results

of the relationship between the reasons for wanting to squat or live in squatter settlements and the population's migration type in Table 5-5.4 reveal that there is a significant association between the two variables ($p = 0.001 < 0.05$). In this case, more long-term migrant population (8 out of 23 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the new migrant population (4 out of 17).

Table 5-5.4: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement Studied Population by Status of Migration

Reasons for moving to the settlements	Long-term migrant		New migrant		Total	
	No.	%	No.	%	No.	%
Wants to escape existing overcrowded condition	8	20.0	4	10.0	12	30.0
Other reasons as follows:	15	37.5	13	32.5	28	70.0
Wants to own property	3	7.5	13	32.5	16	40.0
Wants to sell the existing house for reason related to family	7	17.5	0	0	7	17.5
Wants to give the existing house to children	5	12.5	0	0	5	12.5
Total	23	57.5	17	42.5	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 22.01$, $p = 0.001 < 0.05$ - S.

Yet, this finding seems to contradict our earlier one that the new migrant squatters tend to squat or live in the squatter settlements for cheaper housing. Again, as Table 5-5.4 shows, despite the significant result, both the long-term and new migrant populations are represented in almost similar numbers in the two main reasons. In addition, the number of respondents for the slum population who want to squat or live in the squatter settlements is also smaller than those of the three squatter settlements (40 to 210 respondents). Furthermore, the nature of the period of stay (long-term temporary or permanent) of the slum and squatter population could also make the comparison difficult. For example, if the slum population lived in the city only on a long-term temporary basis (as in the case of garment manufacturing workers), they would not leave their existing residence only for better living conditions, since they need to save as much as they can for the remittance they send to their places of origins (Fieldwork: 1996-1997). Therefore, due to all of these reasons, our earlier finding should not be affected by the result obtained from the slum population.

In relation to the studied slum population's gender structure, Table 5-5.5 reveals that the majority of both the male and female migrant populations want to squat or live in the squatter settlements for reasons other than escaping their existing poor housing conditions. The Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements and the population's gender structure in Table 5-5.5 reveal that there is a significant association

between the two variables ($p = 0.001 < 0.05$). In this case, more male population (12 out of 31 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the female population (all the respondents).

Table 5-5.5: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement Studied Population by Gender

Reasons for moving to the settlements	Male		Female		Total	
	No.	%	No.	%	No.	%
Wants to escape existing overcrowded condition	12	30.0	0	0	12	30
Other reasons as follows:	19	65.5	9	22.5	28	70.0
Wants to own property	7	17.5	9	22.5	16	40.0
Wants to sell the existing house for reason related to family	7	17.5	0	0	7	17.5
Wants to give the existing house to children	5	16.5	0	0	5	16.5
Total	31	77.5	9	22.5	40	100.0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The result of Chi-square test are presented as: $\chi^2 = 17.41$, $p = 0.001 < 0.05$ - S.

Although this finding seems to contradict our earlier one in the case of the squatter population, a comparison with the squatter population should be treated with caution because of other weaknesses in the study. This is because, firstly, the male and female slum populations are employed and have different levels of income from those of the squatter population, which make the comparison between the two cases difficult. Secondly, the number of respondents for the slum population who want to squat or live in the squatter settlements are many times smaller than those of the three squatter settlements (40 to 210 respondents). Therefore, due to these reasons, our earlier finding should not be affected by the result obtained from the slum population.

In relation to the studied slum population's age structure, Table 5-5.6 reveals that the majority of the age groups 16-25, 26-35 and 36-49 want to squat or live in the squatter settlements for reasons other than escaping their existing poor housing conditions, while the age group 50-70 is equally represented in the two main reasons. The Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements and the population's age structure in Table 5-5.6 reveal that there is a significant association between the two variables ($p = 0.003 < 0.05$). In this case, more population aged between 50-70 (6 out of 12 respondents) wanted to squat or live in the squatter settlements for cheaper housing compared with the other age groups.

Table 5-5.6: The Reasons for Wanting to Squat of the Boeng Salang Slum Settlement Studied Population by Age Structure

Reasons for moving to the settlements	16-25		26-35		36-49		50-70		Total	
	N	%	N	%	N	%	N	%	N	%
Wants to escape existing overcrowded condition	0	0	0	0	6	15.0	6	15.0	12	30.0
Other reasons as follows:	3	7.5	11	27.5	8	20.0	6	15.0	28	70.0
Wants to own property	3	7.5	9	22.5	4	10.0	0	0	16	40.0
Wants to sell the existing house for reason related to family	0	0	0	0	3	7.5	4	10.0	7	17.5
Wants to give the existing house to children	0	0	2	5.0	1	2.5	2	5.0	5	12.5
Total	3	7.5	11	27.5	14	35.0	12	30.0	40	100.0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 24.77$, $p = 0.003 < 0.05$ - S.

Once again, this finding seems to contradict our earlier one that the squatter age group 36-49 tends to squat or live in the squatter settlements for cheaper housing compared with the other age groups. Again, as Table 5-5.6 shows, despite the significant result, both the age groups 36 to 49 and 50 to 70 are represented in equal numbers in the first main reason. In addition, the number of respondents for the slum population who want to squat or live in the squatter settlements is also smaller than those of our three squatter settlements (40 to 210 respondents). Furthermore, like the above case, the young populations of both the slum and squatter areas are employed and have different levels of income, which make a comparison between the two cases difficult. Therefore, due to these reasons, our earlier finding should not be affected by the result obtained from the slum population.

- The Planned Method of Obtaining Property in Squatter Settlements of the 40 Slum Respondents Who Plan to Squat:

This sub-section is carried in order to find out how the slum settlers who express the desire to live in squatter settlements will obtain property there. The findings from this study could then verify our earlier finding on the squatter population that the majority of them are only the indirect squatters, and establish whether their demographic and socio-economic characteristics influence their planned methods of obtaining property. According to Figure 5-5.2, there are two main planned methods of moving into squatter settlements of the 40 slum respondents who want to squat or live in squatter settlements in future. However, the Figure also shows that directly squatting vacant land is the most desired method.

In the case of the squatter population in Section 5-3, we found that formal workers tend to be the direct squatters compared with the informal workers. In terms of the relationship between the studied slum population's type of job and the planned method of obtaining property in squatter

settlements, Table 5-5.7 reveals that the majority of formal workers want to squat (as direct squatters), while the majority of informal workers want to buy property (as indirect squatters). Similarly, the Chi-square test results of the relationship between the planned method of obtaining property in squatter settlements and the population's type of jobs in Table 5-5.7 reveal that there is a significant association between the two variables ($p = 0.001 < 0.05$).

In this case, more formal workers wanted to directly squat lands compared with the informal workers. Therefore, the earlier case of the squatter population is further supported by the result obtained from the slum population that the formal workers tend to be the direct squatters compared with the informal workers. In short, in the case of Phnom Penh most formal workers in this study - most of whom are government, military and police force employees wanted to directly squat lands if they will ever move to live in squatter settlements.

Table 5-5.7: The Planned Methods of Obtaining Land in Squatter Settlements of the Studied Population by Type of Job

The methods of obtaining land or houses	Informal workers		Formal workers		Total	
	No.	%	No.	%	No.	%
Wants to squat vacant land	3	7.5	22	55.0	25	62.5
Wants to buy land in squatter areas at low price	9	22.5	2	5.0	11	27.5
Wants to buy house in squatter areas at low price	0	0	4	10.0	4	10.0
Total	12	30.0	28	70.0	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 22.44$, $p = 0.001 < 0.05$ - S.

In relation to the level of income, in the case study of the squatter population in Section 5-3, we found that low-income population tend to be the direct squatters compared to the middle- and high-income population. In terms of the relationship between the studied slum population's level of income and the planned method of obtaining property in squatter settlements, Table 5-5.8 contradicts the earlier finding. In this case, the majority of the middle-income group want to squat (as direct squatters) while the majority of the low-income group want to buy property (as indirect squatters). The Chi-square test results of the relationship between the planned method of obtaining property in squatter settlements and the population's level of income in Table 5-5.8 reveal that there is a significant association between the two variables ($p = 0.001 < 0.05$).

In addition, more middle-income population wanted to directly squat lands compared with the low-income population. Therefore, the earlier finding in the case of the squatter population - that more low-income population were direct squatters compared with the middle-income population - is not

supported by the result obtained from the slum population. Like many cases above in section 5-5.1, although this finding seems to contradict our earlier one in the case of the squatter population, the weaknesses in the study such as the small sample and the different compositions of the populations (types of jobs, income level and nationality) could cause the difference. This is because the number of respondents from the slum population who want to squat or live in the squatter settlements are many times smaller than those of the three squatter settlements (40 to 210 respondents). Therefore, our earlier finding on the squatter population should not be affected by the result obtained from the slum population.

Table 5-5.8: The Planned Methods of Obtaining Land in Slum Settlements of the Boeng Salang Slum Settlement Studied Population by Level of Income

The methods of obtaining land or houses	Low income		Middle income		Total	
	No.	%	No.	%	No.	%
Wants to squat vacant land	3	7.5	22	55.0	25	62.5
Wants to buy land in squatter areas at low price	9	22.5	2	5.0	11	27.5
Wants to buy house in squatter areas at low price	0	0	4	10.0	4	10.0
Total	12	30.0	28	70.0	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 22.44$, $p = 0.001 < 0.05$ - S.

In relation to the population's migration type, a crosscheck with the study sample is since there are no Vietnamese immigrants in the slum sample. However, we could crosscheck the findings on the population's migration status. In the case study of the squatter population in Section 5-3, we found that the long-term migrant population tends to be direct squatters compared with the new migrant population. In this case, the relationship between the studied slum population's migration status and the planned method of obtaining property in squatter settlements, Table 5-5.9 corroborates the finding that the majority of the long-term migrant population want to squat (as direct squatters), while the majority of the new migrant population want to buy property (as indirect squatters).

Table 5-5.9: The Planned Methods of Obtaining Land in Slum Settlements of the Boeng Salang Slum Settlement by Status of Migration

The methods of obtaining land or houses	Long-term migrant		New migrant		Total	
	No.	%	No.	%	No.	%
Wants to squat vacant land	17	42.5	8	20.0	25	62.5
Wants to buy land in squatter areas at low price	2	5.0	9	22.5	11	27.5
Wants to buy house in squatter areas at low price	4	10.0	0	0	4	10.0
Total	23	57.5	17	42.5	40	100

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 12.24$, $p = 0.001 < 0.05$ - S.

The Chi-square test results of the relationship between the planned method of obtaining property in squatter settlements and the population's migration status in Table 5-5.9 also reveal that there is a

significant association between the two variables ($p = 0.001 < 0.05$). In addition, more long-term migrant population wanted to directly squat lands compared with the new migrant population. Therefore, the earlier finding in the case of the squatter population is further supported by the result of the slum population.

In relation to the population's gender structure, the case study of the squatter population in Section 5-3 found that the male population tends to be the direct squatters compared with the female population. In this case, the relationship between the studied slum population's gender structure and the planned method of obtaining property in squatter settlements, Table 5-5.10 corroborates the finding that the majority of the male population want to squat (as direct squatters), while the majority of the female population want to buy property (as indirect squatters).

Table 5-5.10: The Planned Methods of Obtaining Land in Squatter Settlements of the Boeng Salang Slum Settlement by Gender Structure

The methods of obtaining land or houses	Male		Female		Total	
	No.	%	No.	%	No.	%
Wants to squat vacant land	25	62.5	0	0	25	62.5
Wants to buy land in squatter areas at low price	2	5.0	9	22.5	11	27.5
Wants to buy house in squatter areas at low price	4	10.0	0	0	4	10.0
Total	31	77.5	9	22.5	40	100.0

Source: Compiled from the cross-tabulation of SPSS of the field survey (Sep., 1997- Jan., 1998)

Note: The results of the Chi-square test are presented as: $\chi^2 = 30.61$, $p = 0.001 < 0.05$ - S.

The Chi-square test results of the relationship between the planned method of obtaining property in squatter settlements and the population's gender structure in Table 5-5.10 also reveal that there is a significant association between the two variables ($p = 0.001 < 0.05$). In addition, more male population wanted to directly squat lands compared with the female population. Therefore, the earlier finding in the case of the squatter population is further supported by the result obtained from the slum population.

- The Reason for Planning not to Squat or Live in Squatter Settlements of The Remaining 30 Respondents of This Slum Settlement:

This sub-section is carried in order to find out why the rest of the slum settlers express the desire not to live in squatter settlements. This is an attempt to find out whether these reasons are related to the threat of eviction. In addition, do their demographic and socio-economic characteristics influence their decision of not planning to squat or live in the squatter settlements? According to Figure 5-5.3, there are two main reasons for planning not to squat or live in squatter settlements of

the studied population of this slum settlement. Among these two reasons, the Figure shows that fear of evacuation by the government is the biggest concern of respondents who do not plan to squat.

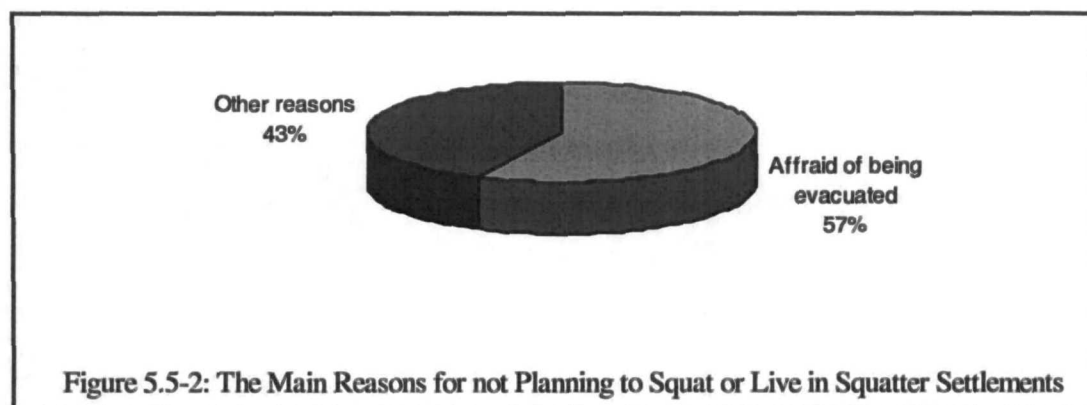


Figure 5.5-2: The Main Reasons for not Planning to Squat or Live in Squatter Settlements

After doing the Chi-square tests to examine the relationships between the variables of the slum population's job type, level of income, type and status of migration, and gender structure and the variable of the decision of not planning to squat or live in the squatter settlements, the results show that there is a significant association only between the variables of the population's migration status and gender structure and the variable of the decision not planning to squat or live in the squatter settlements (both $p < 0.05$ - S.). However, since both of these variables are less important (compared with employment type, income level and type of migration) to the main investigation, they are not further discussed.

The finding implies that the decision of not planning to squat or live in the squatter settlements of the slum population is irrelevant to the slum dwellers' individual power and social status. In other words, it is likely that both the powerful and the powerless, the rich and the poor do not plan to squat because of the threat of eviction. This then does not support our finding in the case of the squatter population. However, since the number of respondents of this type of the slum population is many times smaller than those of the squatter populations' samples (30 to 210 respondents), our early findings should be valid.

5-6 Summary:

Section 5-1, reveals that the majority of the studied population first migrated to Phnom Penh with their families, except in the case of the East Preah Monivong Bridge settlement. The Chi-square test results reveal that, in general, there is no significant association between the studied population's migration status and age structure, and the help or information provided by their relatives or friends in the city. However, the Chi-square test results reveal that there is a significant association between the studied population's migration type and gender structure, and the help or information provided by their relative or friend in the city. In other words, more female Vietnamese and rural-Phnom Penh migrants received help and information compared with other types of migrants before and during migration.

The Chi-square test results reveal that, in general, there is no significant association between the studied population's gender structure, and the way they migrated to the city at first. However, the Chi-square test results reveal that there is a significant association between the studied population's migration type and status and age structure, and the way they migrated to the city at first. In other words, more other cities-Phnom Penh and long-term migrants migrated to the city with their families at first compared with the other types of migrants. It is reasonable that most of the Vietnamese immigrants and those Cambodian migrants whose reasons are for a better income to come to the city alone. This saves them money in the city compared with if they bring their families with them (as presented in Box-1).

It is evident that the majority of migrants who came to the city alone at first did so because they wanted to find employment before bringing other members of the family to live with them (as presented in Box-1 and Box-2, the case of Mr. Thach Sok). This is because the Vietnamese immigrants are new arrivals who cannot yet afford to support their families in the city. In contrast, long-term or other types of migrants have more advantages since they came to the city at a time when property was both easier to find and cheaper. Although families need an income to live on in an urban area, most families could afford living costs in the city during the early period as the then communist government (as presented in Box-2, the case of Mr. Kouy Sok), provided food and other materials.

Box-2: The differences between the interviewees' migration type and status, and job opportunities in the city and the migration situation.**1- The case of Mr. Thach Sok:**

Mr. Thach was married with two children at the time of the interview in January 1997. At the time he was 38 years old. He was born in the central town of Steang Treang province in Cambodia. He migrated to Phnom Penh in 1993 shortly before the national election. According to him, his reason for migration was mainly the insecurity of his place of origin. He finished high school and worked as a district clerk before his migration. Mr. Thach came to the city alone at first because he could not afford to bring his wife and three daughters with him. He had relatives living in the city to whom he paid many visits before his migration. With the help and information he received from his relatives he had found a job as a construction worker at a private company within two weeks of his arrival in the city. During the job-hunting period he was offered free accommodation with relatives.

However, Mr. Thach said he offered a small amount of money for his daily meal to his relatives, even though they declined the contribution. One month later he brought his family from the province to live in a rented house in the Bassac River squatter settlement, where they remained. In his opinion, Mr. Thach concluded that, as a new comer from a rural area, it was difficult to find a job in the stable institutions (formal sectors). He believed this was because, firstly, most private and public companies do not have a high regard of the work experience of people from the countryside. Secondly, although he had relatives to help him to find a job, he insists that the situation would have been more advantageous and easier if he had been in the city for longer than he actually has.

2- The case of Mr. Kouy Sok:

Mr. Kouy was 59 years old and married with 9 children, of whom 6 lived with him at the time of the interview in December 1996. He was born in a village of Kampung Cham province of Cambodia. He migrated to Phnom Penh in 1982 with his whole family. His reason for migrating was that he wanted to live in the city after demise of the Khmer Rouge regime. Before the migration, between 1979 and 1981, he was a secondary teacher at the provincial school.

Mr. Kouy did not have any relatives or friends in the city before his migration. What information he had was obtained through word of mouth: that in Phnom Penh the then government accepted anyone who could work in administration. At the time of his arrival in the city he was immediately offered a job as a schoolteacher. He received a house close to his school in the Resey Keo district of Phnom Penh, as well as subsidised food and other materials from the then government. He has worked as a teacher since then. However, due to personal reasons the house was sold. Since then he has squatted¹ his current plot, on which he has built a house, in the East Preah Monivong Bridge squatter settlement. Mr. Kouy concluded that he did not have any problem, as mentioned earlier, in finding a job and neither had he had any problem in finding a house in the city at that time.

¹ The word "squat" used here is not a direct translation of the term used by Mr. Kouy. He used the term "settle on the vacant and no-man's land" during the interview. However, as mentioned in an earlier chapter, this term means squatting.

Section 5-2 shows that, in general, most of the squatters were aware of the situation in the squatter settlements before they moved to the areas. They knew of the areas through relatives and friends who lived there and who also provided them with the necessary help and information before and during their move. However, the Chi-square test results of the relationship between the connections of the squatters with relatives or friends in the squatter settlements and the squatters' migration type and status, gender and age structure, reveal that there is no significant association between the variables.

It is also evident that all the Vietnamese immigrants in both the Bassac River and East Preah Monivong Bridge squatter settlements received help and information from relatives or friends in the area before buying or renting houses or rooms there, while only one did not receive such assistance. The situation varies from one settlement to another for other migration types. For example, all the migrants from other cities to Phnom Penh in the Boeng Salang slum settlement moved to the area without any assistance, while the majority of this migration type in other studied squatter settlements received help and information from relatives or friends residing there.

Apart from the Bassac River squatter settlement, where only 3 respondents (or 4.3 per cent) of its new migrant population did not receive any help or information before and during their move into the area, all the new migrants of the other studied settlements received such assistance. In general, the Vietnamese immigrants and new migrants were better prepared for the move to the squatter and slum settlements as most of them receive help and information compared with their Cambodian and long-term counterparts. This is reasonable since they are foreigners and new in the city. They therefore need such help to help them settle (as presented in Box-1), as found in other countries. The situation of moving into the studied settlement also varies from one settlement to another. For example, in the East Preah Monivong Bridge squatter settlement the majority of its population (44 respondents or 62.9 per cent) moved to the area alone at first, while the majority of respondents in other studied settlements moved there with their families.

The Chi-square test results of the relationship between the way of moving to the squatter settlement and the squatters' migration type reveal that there is no significant association between the variables. However, the test results of the relationship between the way the squatters moved into the squatter settlements and the squatters' migration status, gender and age structure, reveal that there is a significant association between the variables. In other words, more long-term migrants

who are male and older moved into the squatter settlements with their families at first. The findings also reveal that the main reason for moving into the squatter settlements alone at first is because these respondents are trying to avoid possible financial losses in the event of evacuation or confrontation with authorities. Except in the case of the Bassac River settlement, the majority of each of the remaining three studied populations arrived in the area alone because of this reason.

Section 5-3 shows that among the three squatter settlements, the minority of residents obtained property in the squatter settlements through direct squatting, while the main methods were buying and renting (all illegal). The highest percentage of direct squatting is 37.1 per cent (26 of the total of 70 respondents in each settlement) in the East Preah Monivong Bridge area, while the lowest of 17.1 per cent (12 respondents) is found in Boeng Kak. In Bassac River the percentage is 21.4 per cent (15 respondents). In other words, in all the studied squatter settlements the number of direct squatters or land invaders is less than half of the total population in the areas. The Chi-square test results of the relationship between the method of obtaining the property of the squatters in the squatter settlements and their migration type and status, gender structure, type of job and level of income, reveal that there is a significant association between the variables.

The findings show that more Cambodian, male-dominated, formal employees, who are also long-term residents in Phnom Penh, directly squatted the lands compared with the Vietnamese immigrants, who are newcomers who also work in the formal sector and were only squatter tenants. Therefore, the above findings seem to confirm our earlier conclusion that individual power and influence play an important role in the squatters' access to squatting and the squatter settlements' continued existence. Moreover, the informal interviews with government authorities and retired officials, as presented in Box-3, further confirm that most of the land invaders (or direct squatters) are those powerful, rich and influential groups. The researcher, who himself has worked in the field for three years, and the local and international² observers agree with this finding.

Among many different reasons, this study defines two main reasons for squatting or living in squatter settlements. Section 5-4 shows that in each of the three studied squatter settlements the

² 1- Reaksmey Kampuchea newspaper. "Squatters squat land and build huts for rent and sell"; No. 1058, published Monday-Tuesday, 21st to 22nd October 1996, in Khmer language.

2- Article by Paul Giannone- Deputy director, Emergency Group- CARE. "Boch Non- the village of many widows"; September, 1998.

main reason for squatting or living in squatter settlements is varied. The first reason (the search for cheaper accommodation) is found to a lesser extent among the squatters of East Preah Monivong Bridge (only 33 respondents, or 47.1 per cent) and of Boeng Kak (only 25 respondents, or 35.7 per cent) compared with squatting or living in squatter settlements for other, opportune reasons. However, in the Bassac River squatter settlement the majority of the population (36 respondents, or 51.4 per cent) cite the need for cheaper accommodation as the reason for squatting or living in the area. Thus, in general, the majority of squatters squat or live in the squatter settlements for reasons that are irrelevant to the search for cheaper housing. This corroborates the hypothesis that poverty alone is not the main reason why people squat or live in squatter settlements.

Box-3: Two expressions on squatting from experienced persons³

1- Mr. Eak Oudom was a senior official at the municipality of Phnom Penh's urbanisation and construction department at the time of the interview in September 1996. He has worked there since 1980 and thus has a great deal of experience with housing, planning, development and in particular with squatting in the city. Mr. Eak Oudom concluded that, to his knowledge, the majority of direct squatters were in fact military and police personnel and only the minority were the poor, whose occupied plots were also much smaller compared with those of the earlier group. The squatted areas that have been targeted by the first group are normally in areas with higher land value, while the second group, often in contrast, had invaded land of lower value. However, he added that at new squatters do not have much choice since most areas in the city are no longer vacant.

2- Mrs. Louk Chumteav was a senior staff member of the UNDP and ODA working with the municipality of Phnom Penh at the time of the interview in September 1996. She has worked there since 1994 and has dealt with the squatter and slum population in the city. In her observation and to her knowledge, she agreed with the view of Mr. Eak Oudom, although she pointed out that the case might be different for a few squatters.

The Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the squatters' migration type and status, gender and age structure, reveal that there is a significant association between the variables. In addition, more Vietnamese immigrants who are also new migrants lived in the squatter settlements for cheaper housing compared with the Cambodian squatter population. Finally, the Chi-square test results of the relationship between the reasons for squatting or living in the squatter settlements and the squatters' method of obtaining property reveal that there is a significant association between the

³ For the reason of privacy the author wishes to withhold the real identity of the interviewees as eventually this study might be presented to the government and there could be repercussions for these interviewees.

variables. In addition, the direct squatters lived in the squatter settlements for cheaper housing compared with the indirect squatter population.

Section 5-5 discloses three main points of the studied Boeng Salang slum settlement. Firstly, it reveals that the main reason for planning to squat of this slum population - whether they ever do so or not - is because of other, opportune reasons rather than the need for cheaper housing. Of the total of 40 (100.0 per cent) respondents who consider squatting, only 12 (30.0 per cent) want to squat for cheaper housing (and can therefore not afford other legal housing) and the remaining 38 (70.0 per cent) want to squat for other, opportune reasons. Moreover, the Chi-square test results of the relationship between the reasons for wanting to squat or live in the squatter settlements of the slum population and their migration type and status, gender and age structure, type of job and level of income, reveal that there is a significant association between the variables. However, many of the findings in these relationships contradict those obtained from the squatter population. These are mainly because the slum population's composition (employment, level of income, nationality) is different from that of the squatter population.

The study also shows that among the 40 (100.0 per cent) slum settler respondents who want to squat or live in squatter settlements, the majority (25 respondents or 62.5 per cent) want to invade land, while the remaining 15 (37.5 per cent) plan to buy property in squatter settlements if they ever move to such an area. In other words, obtaining land free of charge in the form of direct squatting is the most desired method of obtaining property in squatter settlements for the majority of the slum population who plan to squat or live in squatter settlements (as presented in Box-4, the case of Mrs. Touch). The Chi-square test results of the relationship between the planned method of obtaining property of the slum population who want to squat or live in the squatter and their migration status, gender structure, type of job and level of income, reveal that in general, there is a significant association between the variables. Like the above case, one of the findings in an examination of these relationships contradicts those obtained from the squatter population. Again, this is mainly because of differences in composition between the populations (employment, level of income, nationality).

Box-4: The case of slum settlers**1- Mrs. Touch Say's case of wanting to squat:**

Mrs. Touch was 54 years old and a widow with three sons who lived with her at the time of the interview in November 1996. She was born in a village in the Takeo province of Cambodia. She migrated to Phnom Penh in 1995 with her sons, who wanted to find jobs or set up businesses in the city. In the province she was a grocer and she had some farmland that she used to lease out to others. She had relatives in the city who encouraged her and the family to move there and who also helped her to settle in the Boeng Salang slum settlement. She had secured a house with 6 rooms, 5 of which are rented out to provide an income for the family. She also opened a small grocery shop in front of her house to supplement the income. Her family is of the middle-income class, which earn around 180.000 Riels per month. Mrs. Touch had heard about squatting in the city and said she would do so if the opportunity arose so that she could have another house to rent out. However, she did not want to buy property in squatter settlements because she could lose her investment in the event of squatter evacuation or resettlement by the city authority.

2- Mr. Sen Phal's case of not wanting to squat:

Mr. Sen was 43 years old and married with two sons and three daughters who lived with him at the time of the interview in November 1996. He was born in the Candal provincial town of Cambodia. He migrated to Phnom Penh in 1991 with his whole family because of a job transfer. He is a civil servant in the ministry of agriculture. In the province he had some farmland that he used to rent out to others. He had relatives in the city who did not help him in getting his current house in the Boeng Salang slum settlement. He remained a government employee, but supplemented his salary by working with an NGO in the city. His family is of the low-income class, which earn around 100.000 Riels per month. Mr. Sen had heard about squatting in the city but did not want to get his family involved, as he was too busy providing for them. He added that most of the squatter settlements were too dangerous to live in as, according to him, crime and prostitution were thriving.

Together with the above finding in the case of squatters, we can conclude that the establishment and growth of squatter settlements in the city are not the by-product of migration and poverty, but rather the result of a lack of land and housing regulations and related laws. This creates opportunities for people to invade land or confusion among the population regarding the right to settle on land. Yet, ineffective and often corrupt government authorities undoubtedly also contribute to squatting. Finally, the section points out that among the total of 30 respondents (100.0 per cent) of the slum settlement who do not plan to squat, the majority (28 respondents or 93.3 per cent) want to avoid possible confrontation and evacuation, while only 2 (6.7 per cent) claim they have no time to squat as they are too busy making a living (as presented in Box-4).

This shows that possible legal action by the government has a great impact on the decision not to squat of these respondents, although their economic status and living standards are more or less the same than that of the 40 slum settlers who plan to squat. The Chi-square test results of the relationship between the reason for not wanting to squat or live in the squatter settlements of the slum population and their migration type, age structure, type of job and level of income, reveal that there is no significant association between the variables. This finding, in general, indicates that the threat of eviction from the authorities has little impact on the decision to squat or live in squatter settlements among the total 70 slum interviewees. This further confirms our earlier finding that individual power and influence, the lack of effective land and housing laws and incompetent and corrupt government authorities are the main factors in the establishment and growth of squatter settlements in the city.

Chapter Six: Considering Conclusion & Policy Implications

- Considering Conclusion:

Though imprecise and often inaccurate, the term “squatter settlement” (defined differently by different scholars) is still commonly used to describe many low income settlements¹. The term is mostly seen as portraying a negative image of cities and a problem that must be resolved by either improvement or demolition. This common negative view toward squatter settlements arises because of the poor housing and living conditions of such settlements. The findings of this study of squatter settlements in Phnom Penh (as also shown in Table 6-1) generally confirm this point. However, poor housing and living conditions in squatter settlements - used by the authorities to crack down on such settlements - are often simply a pretext. This is due to two factors. Firstly, the authorities do not even have the financial ability to provide services to their so-called legal housing territories. Secondly, the living and housing conditions of squatter settlements are as poor as those of legal low income and slum settlements of urban areas, which are recognised by the authorities.

As this study shows, in some parts of the squatter settlements in Phnom Penh housing conditions are very good. For example, as mentioned in chapter 5, in many areas of the East Preah Monivong Bridge and Boeng Kak squatter settlements the housing conditions are even better than in some of the legal parts of the city. Buildings in these squatter areas are high quality multi-storey flats, apartments, villas, hotels, restaurants etc. This is because each squatter settlement has its own, unique characteristics, including the composition of the population (i.e. ethnicity, levels of income, types of employment, types and status of migrants). In fact, the majority of the squatter population is better off than the slum population, and the living and housing conditions of squatter settlements can be improved if they are not demolished by the authorities.

¹ The situation is analogous to the use of the term “informal sector” to describe small scale economic activities.

Table 6-1: Summary of the Comparison Between the Literature and the Study Findings

Factors:	Conventional view	Study findings
Socio-economic characteristics of squatter settlements	generally poor or very poor	corroborate, except in some parts of the settlements
- Housing conditions		
- Living conditions	generally poor or very poor	corroborate
- Services & infrastructure distribution	generally poor or very poor	corroborate
2. Socio-economic characteristics of squatters. Squatters are:	majority	corroborate
- rural-urban migrants		
- new (arrivals) migrants	majority	contradict, minority
- long-term migrants	minority	contradict, majority
- non-migrants (urban born)	minority	none
- low level of education	majority compared with non-squatters	contradict, minority
- low income	majority compared with non-squatters	corroborate, but also like the rest of the city's pop.
- informal workers	majority compared with non-squatters	corroborate, but also like the rest of the city's pop.
3. The squatter composition:	majority	contradict, minority
- land invaders (direct squatters)		
- property buyers (indirect squatters)	minority	contradict, majority
- squatter tenants (indirect squatters)		
4. The reasons for squatting or living in squatter settlements:	generally, the majority of squatters	contradict, only the minority of the squatters
- for cheaper housing		
- for other reasons	minority	contradict, majority
5. Factors influencing the decision of where to squat or to live in squatter settlements:	the main influence	contradict, is only an indirect influence
- the threat of eviction		
- the preferred location of squatter sites (i.e. close to workplace, relatives, rivers etc.)	preferable	the main influence
- individual power and the lack of law and regulations on housing and lands (although these are difficult to prove)	not known	the main influence

Sources: Compiled from literature by different authors as mentioned in Chapter 1, 2 and that of the finding Chapter 4, and 5.

Note: See Table 6-2 for further details

In addition, all the existing services and facilities in squatter settlements have been implemented and are managed solely by the squatter population, while the poor housing, services and facilities in the legal low-income housing settlements are mainly provided by the authorities. This shows that housing and living conditions will improve if the squatters receive help such as subsidies from the authorities. For example, the environmental living and housing conditions in squatter settlements are no worse than in other legal low-income (slum) settlements of the city.

This is partly because the general density per household of the squatter settlements is lower than in the slum settlement. Also, in many parts of the squatter settlements the houses are in a much better condition than those in the slum settlement. Moreover, as summarised in Table 6-2, unlike squatter settlements in most other developing countries where the municipal

governments have changed their negative attitudes towards the settlements and have increased their level of responsibility, such as providing services or legalising the settlements, in Phnom Penh this has not changed. This hostile attitude of the authorities, especially among low-ranking government officials or soldiers, further contributes to the poor living and housing conditions in the squatter settlements.

Table 6-2 : Summary of the development of squatting of three cases

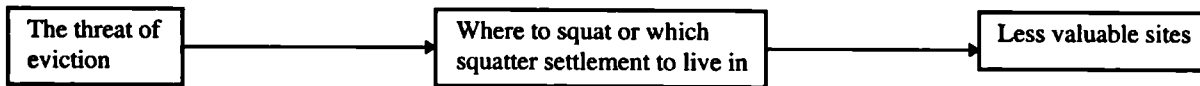
Development of squatting	Latin American case	African case	Cambodian, Phnom Penh case
Supporter	Political party, often the opposition	Government politicians	Government politicians, police/military commanders
Organiser	Representative of squatter family, with the help of professionals and politicians	As above	As above
Direct squatter (seizure, invasion, grabbing etc.)	<i>The majority are landless, poor, low educated rural-urban migrants who work in informal sectors</i>	As above	As above
Their reason for occupying	For cheaper accommodation in cities	For financial gain	For financial gain
Typical location	Vacant, dangerous, polluted public land	Areas will be legalised as low-income areas in future	Wherever land is available, but often on good sites (1)
Post-occupying action	Build houses for own use	Build houses to let	1- Build houses for own use, with extra units to let 2- Divide plots and sell surplus land to finance own house
Indirect squatter (buyer, tenant etc.)	Not known	<i>The majority are landless, poor, low educated rural-urban migrants who work in informal sectors</i>	As in legal areas of the city
Their reason for being in squatter areas	Cheaper housing for the poor and commercial purposes for private firms	Cheaper accommodation	The majority are for other purposes than for cheaper accommodation
Response from municipality	The first reaction is often hostile, such as evacuation, but it often fails. Then acts as service provider or land title issuer	Because the direct squatters are government politicians with more power than the municipality, it often acts as service provider or land title issuer	The first reaction is often hostile, such as evacuation, but it often fails. However, still considers the areas illegal and provides no assistance

Sources: Compiled from literature by different authors as mentioned in chapters 1, 2 and that of the finding chapters 4 and 5.

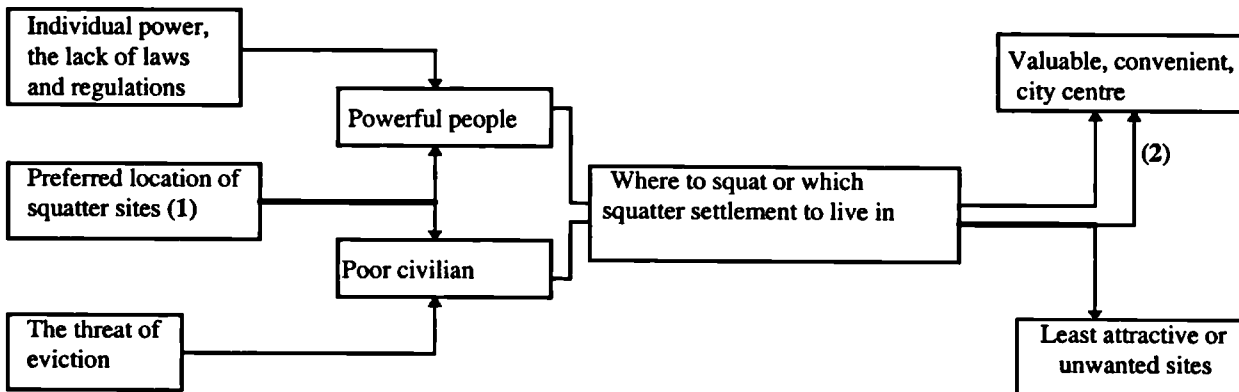
Note: (1)- Serviced lands in good locations, including parks, and highly profitable.

The findings of this study dismiss the perception that land tenure is the most important factor impacting on the condition of housing in squatter areas, as found by many scholars in other developing countries. In the case of Phnom Penh city, as shown in Figure 6-1, geographical location and individual power and the lack of laws and regulations (although like corruption these are difficult to prove) are the most important factors influencing housing conditions in the squatter settlements.

A: The most important factor influencing the choice of place to squat as commonly seen in most developing countries:



B: The most important factors influencing the choice of place to squat as seen in the case of Phnom Penh city:



Note: ———→ Direct influence
→ Indirect influence

(1)- Preferred locations could be sites that are close to workplaces, relatives or friends, or close to the river as cited by the Vietnamese interviewees etc.

(2)- Most poor civilians go there as tenants or buyers rather than as land invaders.

Figure 6-1: What influences the Choice of Squatter Sites

For example, in a recent example of a dispute in a suburb of Phnom Penh², the land owners won seven of the court verdicts, but these were overthrown by the prime minister, who annulled the verdicts and gave the land to the invaders. Most of the invaders and land buyers were military personnel and rich businessmen. In this case, the legal land owners, who are the minority, and low-ranking government officials were victims of the government's local election campaign. The government had tried to win support from the large number of families that invaded the land, while there were also allegations of large bribes changing hands (Interview with the victims: October 1999).

In contrast, the invasion of much larger pieces of land by powerful government officials and military or police personnel have not been challenged by land owners because of the invaders' power. This is only one example of why land tenure is not the main factor influencing the

²This case was published in the local Khmer-language newspaper, the Peace Island, dated October 1999 and obtained by the author during his last visit to Phnom Penh, 16 September to 25 October.

squatters' decision of where to live. In other words, as long as they get support from powerful leaders, land invaders can settle on any land - public or privately owned - without problems. In contrast, as in the case above, land tenure can be annulled by the government leader. This points to another weaknesses in the authorities' approach to squatting: on the one hand, the authorities express a great interest in eliminating the problem of the poor housing and living conditions of squatter settlements by taking such extreme measures as resettlement and forceful eviction.

On the other hand, most - if not all - of these measures fail mainly because of what the authorities claim is a lack of financial resources. All in all, the most puzzling question of the squatter issue is the question of why, if the authorities have inadequate resources but still want to improve their citizens' living conditions, do they often chose to do the opposite? In other words, why do they implement eviction or resettlement programmes instead of squatter settlement improvement or upgrading programmes? In addition, many of the direct and landlord squatters are government employees, who often undermine the implementation of squatter eviction or resettlement programmes, as mentioned below.

The perception that squatters tend to choose sites that are unwanted, dangerous or located far from the city centre so that they face fewer threats from authorities or land owners (as reported by Anthony: 1979, Dwyer: 1975, Hardoy *et al*: 1992, Main *et al*: 1997, Simon: 1992, and others) is invalid in the case of Phnom Penh city. The findings, as shown in Figure 6-1 above, reveal that even in the East Preah Monivong Bridge squatter settlement, which is located in a suburb of the city, the residents did not squat or live there for this reason. None of the interviewees' responses implied anything related to this matter when questioned on their reasons for choosing to live in that settlement. In other words, in the case of Phnom Penh the main influences on the choice of site to squat relate to the availability of land and other family-related matters, and not the security of tenure of the site.

In Phnom Penh, the tradition of abuse of power and corruption by government authorities, the unique and tragic situation of Cambodia whereby the private ownership of property was abolished during the Khmer Rouge regime, and the fact that most of the city's present-day residents originate from rural areas contribute to the phenomenon of squatting. In other

words, as discussed below, many squatters or land invaders do not recognise their actions as being illegal or squatting, but see it as an appropriate response to their need for housing (informal interview with experienced senior government officials and squatters: 1996- 1997).

Firstly, during the sudden change in government from the People's Republic of Kampuchea (1979-late 1989) to the state of Cambodia (late 1989-1993), when private ownership of property was starting to be recognised, many powerful government leaders benefited from the occupation of villas and vacant land (See also Appendix III of how the decree recognises the private property based on who own what at the time of the declaration). This is because prior to 1989 all property belonged to the state and only a handful of the then government leaders had the authority to occupy large tracks of land, and houses or apartments.

Others were not so lucky, including those members of the military and police force who, at the time of the declaration, were fighting the Khmer Rouge guerrillas at the front. When they returned or visited relatives in the city, they were disappointed to learn the state of affairs and started to resent those who became rich because of the government's new policy. This led to them occupying vacant land that were mainly used for or designated for public services, such as parks. Others sold their existing houses and moved to squatter settlements as a way of obtaining foreign currency from members of the UNTAC (See Chapter 1 for further explanation), who had started arriving in the country. Property prices reached a peak during this time and both military and police officials wanted to take advantage of the recognition of private property. House owners were therefore eager to sell or let their existing properties and settle on free or cheap land.

Secondly, during the many civil wars in Cambodia, property owners often had to flee their homes. These properties were then open for occupation by others, who saw it as belonging to no one. Many people from rural areas, where the wars had mostly taken place, have become accustomed to this situation. In addition, as mentioned above, the majority of the current population of Phnom Penh are from rural areas. Squatting, especially at first as in the case of the East Preah Monivong Bridge settlement, was considered by them to be an appropriate response to their need for housing, in particular when they occupied unused public land.

Thirdly, the unique and tragic legacy of the Khmer Rouge regime was not only to abolish the private property title, but also to undermine respect for laws and others among the population. When the Khmer Rouge regime collapsed, it left the majority of the population with little more than their bare, diseased bodies, and they were desperate to own something. This destructive legacy was the cause for the lowering of the Cambodian population's morals to its current level. Compared with the powerful government figures who obtained houses and land after the declaration recognising private property in 1989, squatting or building on empty and unused land that did not clearly belong to anyone seemed justified to the squatters. Those who bought land from the direct squatters feel even more strongly about this matter.

In other words, those who buy property in the squatter settlements view their presence there being less illegal compared with those who own large or numerous properties because of the 1989 decree (informal interview with experienced senior government authorities and squatters: 1996- 1997). Nevertheless, as found in other cities (Eades, article by Werbner: 1987, p. 239), the findings reveal that the level and extent of the provision of both infrastructure and public services in squatter settlements are lower than those found in the rest of the city. For example, water supply is a serious problem in the squatter settlements of Phnom Penh city. Squatters not only pay a higher price for this service, but the water is also of lower quality (often from polluted or untreated sources) when bought from vendors compared with the water available in to the city's population as a whole (ODA & UNDP: 1996, Hardoy *et al*: 1991, UNCHS: 1982).

Similarly, other services such as electricity supply, waste collection and disposal, and the sewage system are also inadequate in squatter settlements and of a poorer quality compared with those provided in other settlements in the city. All of these, as mentioned earlier, can be improved or left to the squatter population, but because of the uncertain future of their settlements and the lack of professional help and initiatives the condition remains unchanged. That is to say, the poor state of the services and facilities in the squatter settlements are a result of the fact that these settlements are banned from receiving such services from the authorities, even if the squatter population can afford to pay for such services.

The findings in Chapter 4 (as shown earlier in Table 6-1 and Table 6-2) confirm that the majority of squatters are rural-to-Phnom Penh migrants. This corroborates the arguments in

the literature review in the case of other cities in developing countries. However, from the status of migration point of view, the findings contradict those found in other cities where the majority of squatters are new migrants (Angel: 1983; Brunn *et al*: 1993; Speare *et al*: 1988; Potter *et al*: 1990; Hassan: 1991 and others). In the case of Phnom Penh's squatter settlements, the majority of squatters are long-term migrants.

Again, this finding stems from the unique situation of Cambodia which resulted from the reign of the Khmer Rouge regime that emptied all urban areas and forced the urban population to settle in rural areas or outside of cities, except in the case of Phnom Penh. After the collapse of that regime, most of the population were allowed to return to urban areas. These early or long-term migrants had the opportunity to occupy vacant land in the city, as explained earlier. Thus, the majority of the city's squatter population and possibly its population as a whole are long-term migrants.

The general finding that most squatters are illiterate or of a low educational level, employed in the informal sector and poor (as reported by Shami: 1994; Juppenlatz: 1970; Hassan: 1992; Burgwal: 1995; Lomnitz: 1977; Muller: 1979; Sethuraman: 1992; Moughtin *et al*: 1992; Choguill: 1987; Sen: 1992; Brunn *et al*: 1993 and others) is still arguable in the case of Phnom Penh. Firstly, the findings of this study reveal that in the Cambodian context and to local standards, in comparison with the rest of the city's population³, the majority of squatters are not of a low educational level as most of them (52.9 per cent of the total studied population of 210) have secondary to university education.

Thus, regarding the level of education of squatters, the general finding in the literature above is invalid in the case of Phnom Penh's squatter settlements. This is because the majority of the squatter population are long-term migrants. Thus, most of them were educated in the city along with the rest of the city's population. In addition, the new migrants to Phnom Penh or those who just arrived from rural areas might have fewer advantages compared with the squatters since the education facilities in rural areas are poorer compared with those in Phnom Penh.

³ See Chapter 4, Section 4-4 for comparison.

This study's data also reveals that the majority of squatters are employed in the informal sector of the city's economy. However, the situation varies from one settlement to another as, for example, the majority of squatters in Boeng Kak are employed in the formal sector while the majority of squatters in the Bassac River and East Preah Monivong Bridge settlements are employed in the informal sector. Thus, in general, our findings on this issue corroborate with the literature.

Yet, that unlike the case of other developing countries, the majority of squatters are long-term migrants, which indicates that type of job seems to be less relevant to status, such as squatter or non-squatter, than indicated in the literature. This is confirmed by the fact that less than 30 per cent of the city's population is employed in the formal sector (Ministry of Finance: 1996, Personal communication). This is because a job applicant's place of residence is irrelevant to the requirements for the job, which only concentrate on the candidate's education, experience and skills. It is also possible that many squatters may be promoted after their move to the squatter settlement. Therefore, employment in the formal or informal sectors is unrelated to the employees' place of residence.

In addition, the study's findings reveal that the majority of squatters have low incomes, as found in the literature reviewed. However, the majority of slum settlers and the majority of the city's population as a whole also have low incomes. That is to say, there is no difference financially between the majority of the city's population and the majority of squatters. Similar to the conditions of employment, this is because the ability to earn of the population is irrelevant to where they live. Many squatters may earn more after their move to a squatter settlement, while others may have a lower income after such a move, but that depends entirely on their type of job and other economic factors, not their place of residence.

Moreover, this study rejects the view that informal workers earn lower wages than formal workers (as viewed in Muller: 1979; Sethuraman: 1992; Moughtin *et al*:1992; Shami, 1994; Brunn *et al*: 1993; and others). According to the findings, the majority of the population of, for example, the Boeng Salang slum settlement who are employed in the formal sector earn lower wages than the majority of squatters who are employed in the informal sector. In other

words, different types of informal or formal employment varies and can generate different levels of incomes.

It further reveals that in comparison, squatters are financially better off than slum settlers. Therefore, the perception that squatters are the poor or poorest of the city's population (as viewed by the same authors above) is invalid in the case of Phnom Penh city. Now, it is clear that the status of the studied population, such as being a squatter or slum settler, is irrelevant to job status and level of income. It is also clear that squatter settlements' living and housing conditions can be improved by their residents, since they can afford to do so if there is a good reason to do so such as recognition of the squatter settlements by the government (this issue is further discussed in the section on policy implications).

The conventional belief that in most developing countries, the majority of migrants come to cities for a better income fails in the case of this study. In contrast, the majority of migrants and especially those from rural areas moved to the city for other, family-related reasons. This is because Cambodia had experienced a unique, mass urban population evacuation during the reign of the Khmer Rouge regime. Following the collapse of that regime, masses of people were allowed to return to the city from the rural areas, which is why the reason for migration in this case is to reunite families and other family-related reasons rather than a search for a better income. It is also due to the fact that during the early years following the collapse of the Khmer Rouge regime there was no place - urban or rural - in Cambodia that could provide a better income. In fact, at that time rural areas might have been a better place to live since crops and other vegetation were available for use by the people, while urban areas were filled with decayed buildings and rubbish as a result of the destruction of the Khmer Rouge regime (See Chapter 1 for further explanation).

However, the findings reveal that all the Vietnamese immigrants migrated to Phnom Penh for a better income. This is reasonable for the Vietnamese immigrants as that country's communist government still has a central plan economy system. According to many of the study's respondents, there were not many jobs that suited their skills and no production work (especially for the young female Vietnamese immigrants) for them in their places of origin. It is noticed that most Vietnamese immigrants did not come from the capital city or other large

cities, but from provinces close to the Cambodian border where agriculture is the main source of employment and income. Therefore, they migrated to Phnom Penh with the purpose of earning extra money with which to support their families in Vietnam.

Our findings also dismiss the presumption that those migrants came to the city alone at first. Here, the majority arrived in the city with their families. Like in the case of the reasons for migration to Phnom Penh, this is also because of the unique situation in the country following the collapse of the Khmer Rouge regime in 1979. Except for those whose relatives were all killed by the brutal regime, most survivors came to Phnom Penh and other areas en masse to settle down with who remained of their families. In this situation, the movement of the population was not a migration for economic purposes, but for other, family-related reasons such as finding lost family members, returning to the place of birth or the ancestral home, escaping the retreating Khmer Rouge forces etc. In other words, whole families migrated because of these reasons during the early years after the collapse of the Khmer Rouge regime.

The findings seem to corroborate most literature on the issue that migrants' relatives or friends residing in cities play an important role in providing information and help before and during the migration. Likewise, the early settlers (relatives or friends) who squat or live in squatter settlements are a very important factor in the majority of the studied population's decision to move into an area. In some cases, especially for the Vietnamese immigrants, the early settlers are vital in providing the newcomers with access to the squatter settlements. Thus, it is not surprising at all that most Vietnamese received help and information before and during their move to the squatter settlements.

This is despite the fact that the Vietnamese population is resented by the majority of the Cambodian population due to a long history of aggression and invasion⁴. However, many of them are also illegal immigrants who do not have permission to stay in the country and are not allowed to work there. They are therefore vulnerable to exploitation by corrupt police and government officials in the city. Yet, by living in squatter settlements they break the law doubly. Hence, help and information are needed to prevent them from being evicted from the squatter settlement and deported from the country, or from having to pay expensive bribes to

⁴ There are many books and documents that referred to this issue, including those of Osborne: 1979, MacDonald: 1987 and Freeman: 1990.

the authorities and police to reverse such actions. In addition, the majority of squatters moved into the squatter settlements at first with their families, as they did when they migrated to Phnom Penh. This is because they were well prepared before moving into the squatter settlements.

Our findings also reveal that among those who move into the settlement alone at first, the majority of them do so because of being unable to afford the cost of supporting the family in the city. Only a minority moved in alone because of wanting to avoid difficulties in the event of confrontation with authorities or land owners. This indicates that most squatters have little or no concern for possible action against squatting or living in the squatter settlements. This is often because squatters bribe local authorities, while in some cases the authorities even illegally collect rent from squatters, which creates a reasonably comfortable relationship between squatters and the authorities.

In other cases, this is because the squatters are mainly police and military officials who have more guns than that is available to the local authorities. Local newspapers often report that military and police officials used their authority to squat vacant land and build houses or sell the plots to the second-generation residents (for example, in Reaksmay Kampuchea newspapers: 1996). This is possible because so far Cambodia has enjoyed a culture of prejudice and immunity where connections, power and wealth carry more weight than the law (Reuters News wire: October, 1999).

This study found that the majority of squatters are only indirect squatters (mainly tenants and buyers). This is because of two possibilities: firstly, most of the direct squatters (who invaded the land) had already left the settlements and had sold their squatted plots to the new settlers, or secondly, the areas were initially invaded by only a small number of powerful and influential squatters who then divided the land into plots to sell or let. Either case implies that the direct squatters are opportunists who squatted the land for commercial purposes rather than because of a desperate need (i.e. for cheaper accommodation). Furthermore, this study is supported by the Chi-square test results that there is no relationship or association between squatters' jobs, income, migration type and status, and the methods of obtaining property in the squatter settlements.

This is because regardless of how rich they are, which job they have, where they come from or how long they have been in the city, buying or renting in the squatter areas are irrelevant to their status. This happens because the many civil wars had demoralised the ethic of the rule of law in Cambodia as a whole. This created a new culture whereby anyone should take advantage of any opportunity to make a profit. A high-ranking person will benefit the most, such as gaining vast tracks of desirable land and luxurious villas or apartment, while low-ranking citizens squat plots of lands. As The Boston Globe (12/14/1999- Article by Adam Piore) reports “Across the country, thousands of people have been evicted from their land in recent months by the rich and powerful. Peace, after nearly 30 years of war, has unleashed a ravenous grasp for land by rich speculators, and powerful officials taking advantage of Cambodia’s confused land laws.”

Unlike in other cases in developing countries where the majority of migrants are believed (See also Chapter 2) to be squatting or living in squatter settlements for cheap accommodation, in the case of Phnom Penh the majority of squatters (both direct and indirect squatters) squat or live in the squatter settlements for other reasons (See also the explanation in Chapter 5, Section 5-4). Therefore, this finding further reinforces the above findings that the majority of squatters are opportunists. At the same time, the researcher is very well aware of the fact that many squatters are the poor and desperate who cannot afford other shelter.

However, because these people are buyers or renters who used own houses in other areas before moving into squatter settlements, they are included as opportunists. In other words, they squat or live in the squatter settlements for reasons other than finding cheaper housing, which they otherwise could afford in the legal housing markets. This finding comes as no surprise to the author as it has been revealed earlier that the majority of direct squatters are government employees, in particular police and military officials.

For example, the case is very clear in especially the Boeng Kak squatter settlements, where the luxurious villas, apartments, hotels and restaurants that are mushrooming in the areas are owned by powerful businessmen who has links with police and military forces or who are themselves in the police force or the army (informal interview with experienced professionals: 1996-1997). In addition, many well-built houses and rooms belong to the same category of

owners. How could these property owners therefore claim to squat or live in the squatter settlements for cheaper housing. However, it is acknowledged that most of these property owners were not included in this study sample, purely as a result of the random method being employed. Many of the direct squatters who were included in the sample are only low-ranking employees of government, the military and the police force. That is possibly one of the reason that our Chi-square test results reveal that these group tend to squat or live in the squatter settlements compared to indirect squatters.

The study's findings are further supported by the results from the survey of the slum population, which found that among those who want to squat, the majority of them want to do so because of opportune reasons rather than because of the need for cheaper housing. This evidence is confirmed by the method of obtaining property cited by most respondents who plan to squat: land invasion. That is to say, if they are asked to buy properties in squatter settlements, these respondents might change their mind. Thus, they plan to squat for opportune reasons and not because of the need for cheaper housing at all. Possibly, the main reason behind this finding is the very low confidence among the general population in the government and in law enforcement in both the city and the country as a whole. This creates a culture of wanting something without having to pay, regardless of who owns the property title. In other words, corruption and the abuse of power create an opportunistic atmosphere. Thus, it is not surprising that the slum settlers who already have shelters want to squat should there be an opportunity for them to do so.

In summary, this study reveals that squatting in Phnom Penh is not caused by new arrivals or the poor as found in much of the literature discussed in Chapter 2. While the majority of the squatter population is poor, this is not related to the phenomenon of squatting. In fact, new migrants who are poor end up living in squatter settlements because the wealthier, more powerful group directly squat the land and then sell the plots to the second wave of residents at a very attractive price. In other words, squatting is not a by-product of new rural-to-Phnom Penh migration, but it is created by those who have the means to do so and can exploit the majority poor and less powerful population searching for affordable housing in the city. By the time the settlements are full, this small group of direct squatters have secured their profits and are protected from legal action by land owners or the government by the mass of indirect

squatters. Thus, in the case of confrontation or squatter eviction, the victims are mostly indirect squatters.

In contrast, in the case of squatter improvement or upgrading programmes, the direct squatters benefit most. In the case of squatter improvement, the direct squatters increase the rent, which in turn drives out the indirect squatters. Therefore, although the majority of squatters are poor, new rural-urban migrants, they are only indirect squatters and are not the cause of squatting. Moreover, the government's lack of financial resources, relevant housing laws and public housing programmes since the early 1970s, as mentioned earlier in Chapter 1, undoubtedly contributes to squatting in the city. In other words, on the one hand, the powerful individuals initiate, organise and execute squatting for their own benefit. On the other hand, this creates low-income housing for the poor in the city. This is the dilemma inherent in the squatter settlements of Phnom Penh: very often measures that the authorities' take against the settlements have only a negative effect on the indirect squatters.

- Policy Implications:

It is not the main purpose of this study to seek a blueprint or action plan to solve the problem of squatting. As has been shown so far, it concentrates on finding the main reasons for squatting and compiling a profile of these squatters. While the author believes that the study has addressed the points raised above, due to the relatively small size of the samples effective solutions would require further study of each squatter settlement in the city. It is obvious in Chapters 4 and 5 of this study that each settlement has a different population composition and the residents have different reasons for squatting or living in the squatter settlements. Different types of studies, such as Cost Benefit Analysis Studies, would also be required before either squatter improvement or resettlement programmes can be implemented.

However, learning from the existing situation and past events related to this case study of Phnom Penh, as summarised in Table 6-3, many suggestions emerge and proposals are made for other cities of Cambodia. It is clear from Table 6-3 that squatter settlements with different characteristics seem to face different obstacles and have different prospects. These are due to two main factors: the ownership of land and the designated use of the land. For example, the

squatter settlements which were originally leased to private companies for commercial development such as the construction of commercial centres or hotels are likely to face less compromises from the authorities and the private companies that own the land. This is because such areas are a source of income for them and because the land prices in these areas are very high due to their location and designated use.

As Table 6-3 shows, different squatter settlements not only face different challenges, they also receive different responses from the authorities due to the two main factors above. Therefore, in considering all of the above factors, the solution for tackling the squatter issue should also vary from one settlement to another. In other words, any solution for squatting should be tailored to the settlement's characteristics. However, as Table 6-3 reveals, three main types of solution are suggested, but even they should be flexible in terms of design and implementation.

For example, a squatter resettlement programme could be varied in that it could provide the squatter population only with compensation they regard as satisfactorily, it could implement a site and service programme, or provide new housing alternatives to the squatters, as in the case of Singapore and Hong Kong. Furthermore, even in a single squatter settlement, all three these methods could be implemented as there are often squatters who want to resettle in other places, while others want to continue to live in the squatter settlement.

In short, there should not be a rigid formula for any of the three methods suggested to tackle the squatter issue with. To show some examples of different situations the three methods could face, Table 6-4 and 6-5 summarises possible challenges and makes some suggestions. The author believes that any solution must be designed based on the characteristics of a specific settlement. Therefore, these tables show only possibilities and the finer detail of the structure and design of the methods have to be further developed.

Table 6- 3: Summary of Responses and Policy Implication Toward Squatter Settlements

Characters of squatter settlements	Responses from authority/land owners	Responses from NGOs/IOs.	The likely obstacles of the settlements to be upgraded or legalised	Suggested solutions
Public owned land for Park	There have been many attempts to evacuate the areas since 1993, but failed. The areas are still considered as illegal.	- Provide with some basic service such as sanitation facilities as promote saving in the community. Also providing help during emergency time such as fire/flooding.	Planners and authorities might argue that the areas disgrace the city aesthetic and breed crime and the vice. Beside property right is also the issue.	Three main solutions could be effectively break the squabbles with the spirit of compromise between the actors involved in the dispute.
Public owned land for religious use (Pagoda)	Few places have already been cleared of squatters with little compensation. The rests are in very high pressure to follow from not only the government but also from the surrounding population.	-Teaching squatters the rights to protect themselves against evacuation, the rights to ask for compensation, the knowledge and experiences of other squatters in other countries in mobilising and organising the community against landlords/authorities, etc.	It is not only planners and authorities, but the surrounding population against the squatters since the areas are religious sacred places. It is the must go issue.	1. Land sharing: parts of the areas to be returned to land owners and the other is arranged for he squatters. 2. Squatter legalisation with payment from squatters. The followings must be solved in order to effectively implement the programme: - To stop property speculation - To stop property trading - To lease the land to only the bona fide squatters of the areas - To improve the living condition of the areas - To discourage squatter landlords in the areas
Public owned land for building services (schools, hospitals, etc.)	There have been mild reaction from the authorities and property's institution. Like others the areas are in the government plan for resettlements.		The main point here is that the areas are designed or used for particular public purposes. It is also argued that allowing squatter settlement to exist close to schools, hospitals also affect the activities there.	3. Squatter resettlement: It is very costly to implement the programme but could be effective if the followings are solved: - If the majority of the squatters agree voluntarily to resettle which is the case of Phnom Penh ¹ - Allocate the new areas where squatters voluntarily agreed. - Provide all or as much as possible the necessary services and infrastructure to the new settlements.
Public or private owned land close to water sources	Despite concerns over water pollution and contamination and poor housing condition of the areas, evacuation have not yet been carried out, excepted the Bassac River close to Cambodiana hotel in late 1993.		Pollution and public nuisance are the main argument against the existence of squatter settlements. Property right is also the issue.	
Public own land for protecting the city (dikes, dams, canals, etc.)	It is less likely to be evacuate although it is also in the government plan of resettlement areas. However, in rainy season, many settlements face resettle due to repair or improvement works of the dikes.		Safety for the city is the main argument here especially during raining seasons and not to mention the property right. The cause of the city sewer system not to flow is also the sticky point in all seasons.	
Public owned land to lease for private companies for commercial purposes	It is the most likely places to be evacuated since these areas located in the prime land and hart of the city. It is also because the areas are leased or sold to private companies that the government have to solve the issue for them in keeping the money that already obtained.		There are more than just the question of property right here. Aesthetic of the city, the value of the land, designate plan of the areas, the pressure from private companies that eventually owned the lands are all the hottest points against the existence of squatter settlements.	- To stop property speculation - To stop property trading - To lease the land to only the bona fide squatters of the areas - To discourage squatter landlords in the areas

Source: Author own source.

¹ According to the surveys carried out by the then ODA with the cooperation of the students of the Phnom Penh Royal Fine Art university in 1994.

Table 6-4: The Possible Strategy for Squatter Resettlement & Legalisation programmes

<i>In the case of squatter resettlement programme</i>				
Actors involved	Possible demand/request from the programme	Possible contribution to the programme	Possible difficulties facing the programme	Possible solution to the difficulties
Legal land owner	To have their land back	<ul style="list-style-type: none"> * Small financial support * Compromise on loosing some part of the land * Commitment 	The ambition to claim all the land back without compromise	Clear and precise explanation of the purpose and impacts of the programme
Squatter tenant	To be able to rent in new areas with similar advantages	Willingness to move to a new place	Not much to be demandable	
Squatter buyer	<ul style="list-style-type: none"> * To be able to find similar areas with similar advantages * Need help with the cost of transportation and rebuilding house in a new place 	<ul style="list-style-type: none"> * Willingness to move to a new place * The sense of compromise * Participation in the programme 	The abuse of power if the actors are military, police or high ranking officers	Clear and precise explanation of the reasons and necessity and impacts of the programme
Squatter land invader	<ul style="list-style-type: none"> * For those who live in the squatter settlement, might demand as above * For those who live outside might demand financial compensation 	<ul style="list-style-type: none"> * The willingness to loose the benefit * The sense of compromise 		
Government	* To get rid of squatter settlements	<ul style="list-style-type: none"> * Allocate a new suitable area * Participate effectively in planning the programme * Prevent corruption in implementing the programme 	<ul style="list-style-type: none"> * Lack of skilled staffs * Rampant corruption in the governing system * Lack of the political will to get involve 	<ul style="list-style-type: none"> * Have to have the political will * Eradication corruption * Acts as co-ordinator and not the instructor or sole planner
NGOs/IOs	Fair treatment toward squatters	Financial, technical support and long-term commitment	<ul style="list-style-type: none"> * Lack of co-ordinated working relationship with the government * Lack of long-term strategy and commitment 	<ul style="list-style-type: none"> * Improve the working relationship with the government * Long-term commitment and strategy
<i>In the case of squatter legalisation programme</i>				
Legal land owner	To have their land back	<ul style="list-style-type: none"> * The willingness to accept the low cost compensated with the lost land * A sense of compromise and kind understanding 	The persistence to claim all the land back without compromise	Clear and precise explanation of the reasons and necessity and impacts of the programme
Squatter tenant	To be able to stay with the same or lower rent	Willingness to pay higher rent as the result of the improvement	The increase of rent in the short time	Clear and precise explanation of the purpose and impacts of the programme
Squatter buyer & land invaders/grabbers	To legalise and obtain the existing properties	<ul style="list-style-type: none"> * Willingness to pay for the land and services provided * The sense of compromise * Participation in the programme * The sense of compromise 	The abuse of power if the actors are military, police or high ranking officers not to pay for the land and others	
Government	<ul style="list-style-type: none"> * To ask squatters to improve physical and living standard of the areas * To be able to collect taxes and other payment for services provided 	<ul style="list-style-type: none"> * High skilled and clean staffs * Participate effectively in planning the programme * Prevent corruption in implementing the programme 	<ul style="list-style-type: none"> * Lack of skilled staffs * Rampant corruption in the governing system * Lack of the political will to get involve 	<ul style="list-style-type: none"> * Have to have the political will * Eradication corruption * Acts as co-ordinator and not the instructor or sole planner
NGOs/IOs	Similar to the squatter resettlement programme mentioned above			

Source: Author own source.

Table 6-5: The Possible Strategy for Squatter Land Sharing programme

Actors involved	Possible demand/request from the programme	Possible contribution to the programme	Possible difficulties facing the programme	Possible solution to the difficulties
Legal land owner	To have their as much land as possible back. Also to have lands with accesses to services and infrastructure in the programme.	Willing to take part in the programme which will loose their original size of the lands.	Do not agree with the programme where they might get unwanted parts of lands as the result of land sharing programme.	Clear and precise explanation of the purpose and impacts of the programme. Also some pressure from the authorities should be put to them.
Squatter tenant	Need help to find similar cheap and in the city accommodation.	Willingness to move to a new place	Not much to be demandable	Clear and precise explanation of the reasons and necessity and impacts of the programme
Squatter buyer	* To get compensation * To have decent house or place in the are to live after the programme is implemented.	* Willingness to take part in the programme * Willing to accept the result of the programme	The abuse of power if the actors are military, police or high ranking officers that could lead to the non participation.	
Squatter land invader	* For those who live in the squatter settlement, might demand as above * For those who live outside might demand financial compensation	* The willingness to loose the benefit * The sense of compromise		
Government	* To have a new face lift settlement * To be able to collect tax in the area.	* Able to mediate between the actors involved * Participate effectively in planning the programme * Prevent corruption in implementing the programme	* Lack of skilled staffs * Rampant corruption in the governing system * Lack of the political will to get involve	* Have to have the political will * Eradication corruption * Acts as co-ordinator and not the instructor or sole planner
NGOs/IOs	Fair treatment toward squatters	Financial, technical support and long-term commitment	* Lack of co-ordinated working relationship with the government * Lack of long-term strategy and commitment	* Improve the working relationship with the government * Long-term commitment and strategy

Source: Author own source.

In terms of the above conclusion, however, the author suggests that in carrying out whichever policies governments devise to solve the problem of squatting, they should keep in mind that they are dealing with three different types of squatters who have different reasons for squatting or living in the squatter settlements. As shown in Table 6-6, these are:

- Direct squatters, who are a minority among the total squatter population and who seem to benefit most from squatter upgrading programmes. Even in the case of squatter settlement demolition programmes, this minority group will lose little or nothing since they have already made their profits from the sale of plots or the collection of rent from indirect squatters.
- Indirect squatters, who bought land from the direct squatters, seem to benefit second most from the squatter upgrading programmes or land tenure concessions by the authorities. However, this group is also the most devastated should squatter settlement demolition be carried out, since most of their savings and earnings have been invested in the properties.
- For indirect squatters who are squatter tenants, squatter upgrading programmes seem to make them more vulnerable than do them any good. This is because, firstly, once the squatter settlements are legalised or upgraded, property prices will rise and squatter landlords will increase the rent. Thus, squatter tenants are once again out-priced by the higher income group (See also Hardoy *et al*: 1990, p. 18). Secondly, the rent will not increase in the case of a threat of eviction from authorities. Thus, the group only enjoys affordable rent if there are no upgrading programmes.

Table 6-6: The Possible Impact of Government Policies on the Squatter Population

Types of government policies toward squatter settlements	Types of squatters		
	Direct squatters (Land invaders)	Indirect squatters (Buyers)	Indirect squatters (Tenants)
Squatter improvement programmes	+++	++	---
Squatter resettlement programmes	-	---	+

Source: Author

Note: + positive impact

- negative impact

We also find that there is no common picture of squatter population composition among the three studied squatter settlements. Therefore, any policy attempting to deal with squatting should be designed uniquely for each settlement and should not attempt to be a prototype

solution for all the settlements of the city. Of course, this suggestion might sound expensive and time-consuming, but the many failed projects carried out by governments were perhaps even more expensive in the end.

An attempt to apply this study of squatter settlements in Phnom Penh to other cities of Cambodia is constrained by the fact that each city has unique characteristics, such as its economic potential, the size and density of the population compared with the physical size of the city, and the land available to each local authority. Phnom Penh is a special case in Cambodia due to the concentration of all of the country's important economic activities and government institutions. Its population of around one million is more than twice the size of that of the country's second largest city, Battambang.

At the time of writing, there had been no official reports (such as in the local press or government reports) of squatting in other cities of the country, apart from the notorious grabbing of land in rural areas by powerful military and police officials and high-ranking government employees. This is possibly because there is no squatting, or it is insignificant since most of the other cities have not yet experienced the same population pressure as in Phnom Penh. However, there are many experiences that could provide useful information and examples for other cities in the future. Although at the time of writing other cities had not yet experienced similar pressure as Phnom Penh on their urban land use, this will happen as the country becomes more stable politically and economically.

This could lead to the dispersal of economic investments from the capital city to other cities. In addition, the upgradation and expansion of infrastructure and telecommunications that will connect the capital to most parts of the country, and the fact that the country has been accepted as one of the 11 members of the ASEAN (Association of South-east Asian Nations) will inevitably encourage economic development in most of the other large cities (Reuters News Wire: 1999). As a result, these cities will have to prepare for the inflow of migrants in response to the new economic investments. Therefore, as happened in Phnom Penh city, squatting could once again be taken over, not by the new migrants, but by powerful individuals who take advantage of the new arrivals' demand for housing and by property speculators who drive up prices.

The case study of Phnom Penh case shows that the new arrivals have the ability to invest, at least in the long-term, in their housing. Therefore, those cities' authorities should initiate low-income housing programmes by leasing the vacant or reserved land to the population, instead of leaving it to be invaded by a small group of wealthy and powerful squatters who will then sell or rent to the second wave of residents. Moreover, to prevent vast tracks of urban lands being left undeveloped by property speculators, as in the case of Phnom Penh, other cities' authorities should review their regulations relating to urban land use.

As Sagga & Malcombe (1995: 84) suggest: "There is a need to develop a mechanism that will discourage land speculation. One possibility may be through charging higher rent for undeveloped land, or setting a land ceiling for individuals and/or institutions." It is understood that during the author's September-October 1999 visit to Phnom Penh, such regulations were being drafted by the government. However, having regulations is only the beginning, while implementing and enforcing the law are the real tasks that very often fail to materialise in the country's current atmosphere of rampant corruption and lawlessness (Reuters News wire: October 1999).

Finally, since the majority of squatters are not new arrivals, the government should abandon their migration control policies. This study reveals that squatting is not caused by the new arrivals, but by long-term migrants. The government should therefore rather embrace urbanisation and strive to make cities work effectively. It should also not use its limited resources as an excuse. The author believes that it is often not the lack of resources that causes urban housing problems, but rather ineffective, irresponsible, incompetent, partisan and corrupt governance that allows such problems to develop.

APPENDIX-1:

The roles of the government involved in land and housing can be seen when land or house owners wish to renovate, build on or trade property and apply for the land or house tenure, which could be summarized as follows¹:

- Nobody could claim rights to any land or property before 1979;
- Property rights could be acquired by any family who live in houses (including villas and apartments) at the time of the decree (April 1989);
- The ownership of the house could be passed on to descendants or donated to family or friends or sold to a third party, but it was prohibited to sell to foreigners.
- The house owners had to pay rent on the land the houses stood on. In the case of government employees, labourers and members of the armed forces the annual rent was not to exceed 5 % of their net annual salaries.

Moreover, in an attempt to maintain public order in Phnom Penh city in relation to land and housing issues, the following articles² were also put into practice by the government:

- Article 1: People who are lawfully regarded as Phnom Penh residents are those whose name is registered and approved by the local authority;
- Article 2: Phnom Penh residents should report and register with local authorities where they live;
- Article 3: Before all the existing buildings (houses, apartments, offices blocks, etc.) regardless of their construction types and ownership (public or private) can be renovated, reconstructed, or demolished and rebuilt, the owners of the property must apply for permission to do so from the government authorities. If the owners are civilian, they must apply for permission from the municipality of Phnom Penh through local authorities and competent institutions. If the owners of the property are military or civil servants, they must apply for permission from the municipality of Phnom Penh through their institution;
- Article 4: The height of a proposed building is decided by the zoning regulations of the area where the construction is located, i.e.: the cultural zones, administrative zones, manufacturing

¹ The following points are translated by the author from the 1989 sub-decree and the draft of the decree on the "Public Management and Regulation in Phnom Penh city" in 1993 which was published in Khmer language. Although the decree has 59 articles, the author highlights here only those which are relevant to land or housing issues.

² Source: The same as footnote No.11

industrial zones, commercial zones, residential zones, which is to be examined and approved by the competent authorities.

- Article 5: After receiving permission for construction or renovation of the property from the municipal government, the owner must apply for permission to commence or finish the work before it is done on the construction site;
- Articles 6 and 7 discuss public sanitation and safety of the work on site during construction or renovation;
- Article 8 discusses the construction tax which property owners have to pay to the government, which is varied and depends on the type of construction;
- Article 9 discusses the penalty and fine payable if the property owner fails to comply with the construction plan approved by the municipal government;
- Article 10 discusses the penalty and fine for construction work undertaken without permission from the municipal government, as well as for such work with permission but of where the owners or representatives of the property fail to present themselves at the construction site during working time;
- Article 11 discusses the use and occupation of public land in the case of necessity;
- Article 12, which is the last, relate to land and housing issues and discusses public sanitation and safety issues which could affect surrounding areas during handicraft or industrial construction.

APPENDIX- II:

Development Planning Unit

University College London

**The Socio-Economic Characteristics of Squatters and their Reasons for Living in
Squatter Settlements.**

**The Case Study of Squatter Settlements in Phnom Penh City, the Kingdom of
Cambodia.**

September, 1996-February, 1997

Researcher: B. H. S. Khemro

M.Phil/Ph.D.

Academic Year of Study: 1995-98.

QUESTIONNAIRE FOR INTERVIEWING THE SQUATTERS

Interview No:

Serial No:

Hello. I am a Ph.D. student at the D.P.U., University College London, in London, U.K. I am doing research on low-income housing and especially on squatter settlements in Phnom Penh city. The aim of this research is to assess and identify the characteristics of squatter settlements and the reasons for living in these areas. You have been chosen to be interviewed through a random method of selection and your answers will be treated confidentially, being used only for the purposes of the research. Could you spare 30 minutes to answer some questions about how you came to the city and settle down in this area.

Part I: General Questions:

Sex:

1. Male
2. Female

Q 1 How old are you?

.....

Q 2 (a) Are you the head of the household?

Yes No

Q 3 (a) What is your present marital status?

1. Single
2. Married (answer b and c)
3. Divorced or Widowed

5. Other

Q.4 Do you have any children?

Yes

No (**If yes**, answer the following)

(a) How many?

.....

(b) How old are they?

1. First child.....

2. Second child.....

3. Third child.....

(c) What are their jobs?

1. First child.....

2. Second child.....

3. Third child.....

(d) Do all of them live with you?

.....

Q.5 (a)- Were you born in Phnom Penh?

Yes

No (answer b)

(b) Where were you born?

1. Village, Town

2. City

3. Foreign country

Q. 6 Where did you live before moving to Phnom Penh?

1. Village

2. Town

3. City

Q. 7 How long have you been in Phnom Penh city?

Years Months.....

Part II: The Reasons For Living in Phnom Penh, and in The Squatter Settlements

Q. 8(a) Why did you move to Phnom Penh city?

- (1) Job transfer
- (2) To seek better income
- (3) To seek a specific type of job
- (4) Income was insufficient to support family
- (5) Nature of work unsatisfactory
- (6) Bought land/ have business in Phnom Penh
- (7) To get education for children
- (8) To get education for self
- (9) To get married
- (10) To accompany family
- (11) Poor amenities in my first place of residence
- (12) Have other friends and relatives here
- (13) Family/social feuds in the place of origin
- (14) Otherspecify
- (15) Do not know

(b) Which of these reasons was the most important to you?

.....

Q. 9 (a) Did you have any friends or relatives in the city before you moved to the city?

Yes No (If the answer is No, skip to Q 10)

(b) Whom did you know?

1. Friends

2. Relatives

3. Otherspecify

(c) What did he/ she (they) do for work?

.....

(d) Did you get any information, advice and help from them before you came?

.....

Q 10 Who came with you to the city at first?

1. Alone

2. With family

3. Others.....specify

- If alone, why did you come to the city alone?

.....

Q 11 Did anyone join you later?

1. No one

2. Family

3. Other.....Specify

Q 12 Why did you move into this settlement?

.....

Q 13 Who came with you to this settlement at first?

1. Alone

2. Family

3. Other.....Specify

Q 14 (If alone) Why did you come to this area alone ?

.....

Q 15 Did anyone join you later?

1. No one
2. Family
3. Others.....specify

Q 16 How long did you stay alone before they joined you?

.....

Q 17 (a) Did you have any friends or relatives living in this settlement before you moved in?

Yes No (If the answer is No, skip to Q 18)

(b) Whom did you know?

1. Friends
2. Relatives

(c) What was his/her (their) job(s)?

.....

(d) Did you get any information, advice or help from them before you came?

Yes No

Part III: Squatter Housing Situation

Q 18 (a) How long have you lived in this settlement?

1. Since I first arrived in Phnom Penh
2. Other time(answer the following)

(b) Where did you live in Phnom Penh before moving into this squatter settlement?

.....

(c) With whom did you live?

1. Relative
2. Friend
3. Others.....Specify

(d) What type of accommodation was it?

-Flat

-House

-Room

-Hut

-OtherSpecify

(e) Did you own it?

Yes (if yes, answer f) No

(f) Do you still own it?

Yes No

Q. 19 (a) How did you get this accommodation?

.....

(b) Why did you chose to live here?

.....

Q. 20 How many people live in this house?

.....

Q. 21 Is your house provided with:

(a) Electricity?

Yes No

(b) A sewage system?

Yes No

(c) Sanitation (waste collection and disposal)?

Yes No

(d) How do you get the above services?

1. Illegally
2. Legally.....Specify

Q. 22 How does your family get water ?

1. Public water pipe into the house
2. Collect water from public water pipe outside the house
3. Collect water from public dam or well
4. Buy water from private vendors
5. Other.....Specify

Q.23 (a) Do you have any difficulties living here?

Yes

No

(b) If yes, what are the difficulties?

.....

(c) Do you plan to live here for good?

Yes

No

Part IV: Education and Employment of Squatter Households

Q. 24 Which level of education have you attained?

1. Illiterate or semi-literate
2. Primary
3. Secondary - High school
4. University
5. Post-graduate

Q.25 (a) What are you doing for a living?

- (1) Employed**

- (2) Self-Employed
- (3) Unemployed (Answer Q.26)
- (4) Housework (Answer Q.26)
- (6) Student (Answer Q.26)
- (7) Other.....Specify

(b) What kind of job is it?

.....

(c) How many workers are in your working place?

.....

(d) Do you have other jobs apart from the main job?

.....

Q. 26 (a) What did you do before moving to Phnom Penh?

- 1. Employed
- 2. Self-Employed
- 3. Unemployed (Answer Q.27)
- 4. Housework (Answer Q.27)
- 5. Student (Answer Q.27)
- 6. Other.....specify

(b) What kind of job was it?

.....

(c) How many workers are in your working place?

.....

Q. 27 (a)What does your spouse do?

- 1. Employed
- 2. Self-Employed
- 3. Unemployed (Answer Q.28)

4. Housework (Answer Q.28)

5. Student (Answer Q.28)

6. Otherspecify

(b) What kind of job is it?

.....

(c) Does your spouse have other jobs apart from the first job?

.....

Q. 28 (a) What are your children doing?(only for interviewee who has child/children)

1. Employed

2. Self-Employed

3. Unemployed (Answer Q.29)

4. Housework (Answer Q.29)

5. Student (Answer Q.29)

6. Other.....specify

(b) What kind of job is it?

.....

(c) Does your children have other jobs aprt from the first job?

.....

Part V: Respondents' Wealth

Q 29 (a) Did your family own any land before moving into this area?

Yes

No (If the answer is No, skip to Q 32)

(b) How big was the total land?

.....acres

(c) What kind of land?

1. Agricultural use
2. Commercial use (Answer Q.24)
3. Industrial use (Answer Q.24)
4. Residential use (Answer Q.24)

(d) How much of it was cultivable?

.....

(e) What kind of crop did you cultivate on your land?

.....

(f) What was the total yield in the last year before you moved here?

.....

Q 30 Did you employ any labour?

Yes

No

If Yes, how many?

Q 31 (a) Did you lease any land?

Yes

No (If the answer is No, skip to Q. 32)

(b) How much?

.....acres

(c) What kind of land?

.....

(d) Why did you lease?

.....

(e) What happened to your land after you came to this area?

.....

Q 32 (a) Did you rent any land?

Yes No (If the answer is No, skip to Q 33)

(b) How much did you rent?

.....acres

(e) What kind of land

1. Agricultural use

2. Commercial use

3. Industrial use

4. Residential use

(f) What happened with the land you rent after you moved to this house?

.....

Q 33 Did your family own any houses?

Yes

No

If Yes, how many and what type of house?

.....

Q.34 (a) Did your family have any livestock?

Yes

No (If yes, answer b and c)

(b) What kind of livestock?

.....

(c) How many?

.....

Q 35 (a) Was your family in debt?

Yes (if yes answer b)

No

(b) How much was it?

.....

Q 36 (a) Did your family have the following?

1. Fridge
2. Fan
3. Television
4. Car
5. Air conditioning
6. Tractor
7. Motorcycle
8. Motorised water pump
9. Well
10. Cycle or tri-cycle
11. Radio
12. Casette player
13. Disk Player
14. Other.....Specify

(b) How many?

.....

Q 37 (a) Does your family own any land somewhere else?

Yes No (If the answer is No skip to Q 41)

(b) What kind of land?

1. Agricultural use
2. Commercial use
3. Industrial use
4. Residential use

(c) How much is the total land?

.....acres

(d) How much of it is cultivable?

.....

(e) What type of crop did you cultivate on your land?

.....

(f) What was the total production value in the last year before you moved here?

.....

Q 38 Do you employ any labour?

Yes

No

If Yes, how many?

.....

Q 39 Does your family own any house some where else?

Yes

No

If yes, how many?

.....

Q 40 (a) Do your family have the following now?

1. Fridge

2. Fan

3. Television

4. Car

5. Air conditioning

6. Tractor

7. Motor cycle

8. Motorised water pump

9. Well

10. Cycle

11. Radio

12. Cassette player

13. Disk Player

14. Other.....Specify

(b) How many?

.....

Q. 41 Is your family in debt ?

Yes

No

If yes, how much is it?

.....

Q. 42 Does your family have any livestock?

Yes

No (If yes, answer b and c)

(b) What kind on livestock?

.....

(c) How many?

.....

Q. 43 (a) How much is your total expenditure per day, week or month?

.....

(b) How much is your income per day, week or month?

.....

(e) How many sources of income does your family have?

.....

(f) If the income is lower than the expenditure, researchers should ask how the interviewed family meets the deficit?

1. By borrowing

2. By other sources.....Specify

Others:

APPENDIX- III:
QUESTIONNAIRE FOR THE SLUM SETTLERS

Interview No:

Serial No:

Hello. I am a Ph.D. student at the D.P.U., University College London, in London, U.K. I am doing the research on low-income housing and especially on squatter settlements in our Phnom Penh city. The aim of this research is to assess and identify the characteristics of squatter settlements and the reasons for living in these areas. The reason why you have been chosen for the interview is that I would like to have your opinion on those squatter settlements. You have been chosen to be interviewed through a random method of selection and your answers will be treated confidentially, being used only for the purposes of the research. Could you spare 30 minutes to answer some questions about it?

Part I: General Questions:

Q.* Are you aware of squatter settlements in the city?

Yes

No

***If the answer is yes, the interview will continue.**

***If the answer is no, the interview will be terminated, and the interviewer has to proceed to the next interviewee.**

Questions Q.1 to Q.7, are the same as for the squatters.

Part II: The Reasons For Living in Phnom Penh

Questions Q. 8 to Q. 13 are the same as for the squatters.

Q.14 (a) Have you ever thought to live in squatter settlements?

Yes

No

(b) Why?

.....

(c) If you plan to live in squatter settlements in future, how do you intend to get land or a house in that area?

-By squatting

- By renting

- By buying from the previous squatter

- By receiving, relatively free of charge, from friends, relatives, etc.

-Other,..... please specify

Q .15 (a) Do you have any friends or relatives living in squatter settlements ?

Yes

No (If the answer is No, skip to Q 16)

(b) Whom do you know?

1. Friends

2. Relatives

3. Otherspecify

(c) What was his/her (their) job(s)?

.....

(d) Will you ask them for help or advice if you plan to move to squatter settlements?

Yes

No

All the questions of **Part III** (The Interviewee's Housing Situation), **Part IV** (Education and Employment of Squatter Households) and **Part V** (The Interviewee's Wealth), are the same as those for the squatters.

BIBLIOGRAPHY:

- Abella, M. I. 1992. "Contemporary Labour Migration from Asia: Policies and Perspectives of Sending Countries". In Kritz, M., Lim, L.L. & Zlotnik, H (ed.). *International Migration System, A Global Approach*. Oxford: Clarendon Press.
- Abrams, C., 1964. *Man's Struggle for Shelter in a Urbanising World*. New York: The MIT Press, Mass.
- Aiken, S. R., 1981. *Squatter and Squatter Settlement in Kuala Lumpur*, The Geographic Review. Vol.71,p.159-175.
- Al-Azzawi, S. S., 1969. Oriental House in Iraq. In Oliver Paul(ed.), *Shelter and Society*. New York : Praeger. p.91-102.
- Allen,E., 1988. *Housing Programmes, Opposition Government, and More Toward Democracy in Brazil: 1983-1986*, Occasional Paper No. 49. Glasgow: University of Glasgow. Latin American Studies.
- Amis Philip 1987. Migration, Urban Poverty and the Housing Market, the Nairobi case in Eades Jeremy (ed.) 1987. *Migrants, Workers and the Social Order*. ASA Monographs 26; London: Tavistock.
- Angel, S.; Raymon, W. A.; Tanhiphat, S.; and Wegelin, E. A., 1983. *Land for Housing the Poor*, Singapore: Select Books.
- Anthony, H.A., 1979. *The Challenge of Squatter Settlements with Special Reference to the Cities of Latin America*: Centre for Human Settlement Press, Issue 3, University of British Colombia.
- Anzorena Jorge and Wendy Poussard., 1985. A Time To Blind, *People's Housing in Asia*. Hong Kong: Plough Publication.
- Archer John., 1986. *Migration*. Aspects of Modern Sociology, Social Process. London: Longman.
- Ayata G. A., 1987. Migrants and Natives: Urban Bases of Social Conflict in Eades Jeremy (ed.) 1987. *Migrants, Workers and the Social Order*. ASA Monographs 26; London: Tavistock.
- Babbie, S., 1990. *Survey Research Methods*, 2nd ed., Belmont, CA: Wadsworth.
- Barron J. and Paul A., 1977. Murder of a Gentle Land. *Peace with Horror: The Untold Story of Communist Genocide in Cambodia*. London: Hodder and Stroughton.
- Basu, A. R., 1988. *Urban Squatter Housing in Third World*; Delhi: Mittal publication, India.

BIBLIOGRAPHY

- Battistella, G. & Paganoni, A (eds.). 1996. *Asian Woman in Migration*. New Manila: Scalabrini Migration Centre.
- B.B.C.- *Monitoring. Summary of World Broadcasts*, 18 February 1998. Part 3- Asia-Pacific, London.
- Bedford, R. D. 1973. *New Hebridean Mobility: a Study of Circular Migration*, Dept. of Human Geography HG/9, Australian National University, Canberra.
- Berger, R. M. and M. A. Patchner, 1988. *Implementing The Research Plan*; London: Sage Publications.
- Billiet, J & Loosveldt, G., 1988. *Improvement of the Quality of Responses to Factual Survey Questions by Interviews*, Public Opinion Quarterly, Vol 50, pp. 190- 211.
- Brunn Stanley D. et al, 1993. Cities of The World: *World Regional Urban Development*. (Second edition), New York: Harper Collins College Publishers.
- Boyd, Monica. 1989. "Family and Personal Networks in International Migration: Recent Developments and New Agendas". *International Migration Reviews* No 23, pp. 638-70.
- Burgess R., 1982. Self-Help Housing Advocacy. A Curious Form of Radicalism. A critique of the work of John F. C. Turner. In Ward, P.M.(ed.): *Self-Help Housing A Critique*. London: Mansell, p.55-97.
- Burgess Rod, Marisa C., and Theo K., 1997. The Challenge of Sustainable Cities: *Neoliberalism and Urban Strategies in Developing Countries*. London and New Jersey: Zed Books.
- Burgwal Gerrit, 1995. Struggle of The Poor: *Neighbourhood Organisation and Clientist Practice in a Quito Squatter Settlement*. Amsterdam: University of Amsterdam.
- Campbell, D. T. & Fiske, D. W., 1959. Convergent and Discriminant Validation by the Multitrait- Multimethod Matrix, *Psychological Bulletin*, Vol. 56, pp. 81-105.
- Chabbi, M., 1986. The Pirate Sub-developer: A New Form of Land Developer in Tunis: *International Journal of Urban and Regional Research*. Vol. 12, No. 1, p. 8-21.
- Champion, T. & Fielding, T. (ed.). 1992. *Migration Processes & Patterns*. Volume 1 Research Progress and Prospects. UK: Belhaven Press.
- Choguill L. Charles., 1987. *New Communities for Urban Squatters*. Lessons from The Plan That Failed in Dhaka, Bangladesh. New York: Plenum Press.
- Cronbach, L.J. 1951. "Coefficient Alpha and the Internal Structure of Tests", *Psychometrika*, Vol.16, pp.297-334.
- Danielson, M. N. and Keles, R., 1985. *The Politics of Rapid Urbanisation: Government and Growth in Modern Turkey*. London: Holmes & Meier.

BIBLIOGRAPHY

- Dasgupta Biplab et al (eds.), 1991. *Calcutta's Urban Future: Agonies from the Past and Prospects for the Future*. Scree Saraswaty Press, Government of West Bengal, India.
- David Deborah S., Richard Kraus, Barry Naughton and Elizabeth Perry (eds.). 1995. *Urban Spaces in Contemporary China: The Potential for Autonomy and Community in Post-Mao China*. Cambridge: Woodrow Wilson Center Press and Cambridge Univeisty Press.
- Davidson F. Ismailia., 1984. Combine Upgrading and Site Services Project in Egypt: In Payne,G. K.(ed.), *Low Income Housing in Developing World: The Role of Site and Services and Settlement Upgrading*. Chichester: John Wiley & Sons. p.125-148.
- Davin, Delia. 1999. *Internal Migration in Contemporary China*. New York:ST.Martin's Press, Inc.
- Davies, K.,1972. *World Urbanisation 1950-1970, Volume 1: Basic Data for Cities, Countries and Regions*, Institute of International Studies, Population Monograph 4, Berkeley: University of California Press.
- Day, L. H. & Xia, M. 1994. *Migration and Urbanisation in China*. An East Gate Book. New Your: Sharpe, Inc.
- Denzin, N. K. & Lincoln, Y. S., 1994. Introduction: Entering the Field of Quantitative Research, in Denzin, N. K. & Lincoln, Y. S. (eds.), *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage, pp.-7.
- Dietz, H., 1977. "Land Invasion and Consolidation": A Study of Working Poor/Governmental Relations in Lima, Peru. *Urban Anthropology*, Vol.6, p. 371-85.
- de Vause, D. A., 1996. Survey in Social Research, 4th ed., London: UCL Press.
- Turner, C. F. & Martin, E. (eds.), 1984. *Survey Subjective Phenomena*, New York: Basic Books.
- Drakakis-Smith, D. W., 1981. *Urbanisation, Housing and the Development Process*. Buckingham: Croom Helm.
- Dwyer D. J., 1975. *People and Housing in Third World Cities. Perspectives on the Problems of Spontaneous Settlements*. London: Longman.
- Eades Jeremy (ed.) 1987. *Migrants, Workers and the Social Order*. ASA Monographs 26; London: Tavistock.
- Eyre, L. A., 1972. The Shanty Towns of Montego Bay, Jamaica, *Geographical Review*, Vol. 62, p. 314-413.
- Fick, U., 1992. Triangulation Revisited: Strategy of Validation or Alternative?, *Journal for the Theory of Social Behaviour*, Vol. 24, pp. 22- 175.
- Fields, G. S.1974. *Rural-Urban Migration, Urban Unemployment and Underemployment, and Job-Search Activities in LDCs*. New Haven, Conn: Yale University.

BIBLIOGRAPHY

- Fowler, J. F. J., 1993. *Survey Research Methods*. London: Sage Publications.
- Frank Kehl, 1981. Hong Kong Shanty Towns: *The Demography and Household Economy of Intra-Urban Migration and Housing*. Colombia University.
- Gilbert, A. G. and Ward, P. M., 1982. Residential Movement Among The Poor: *The Constraints on Housing Choice in Latin American Cities*. Transaction Institute of British Geographers, Vol. 7; No 2, New Series, p. 129-149.
- Gilbert, A. G. and Ward, P. M., 1985. *Housing, the State and the Poor: Policy and Practice in three Latin American Cities*. Cambridge: Cambridge University Press.
- Gosh, Manomohan, 1968. A History of Cambodia: *From Earliest Times to The French Protectorate*. Calcutta: Oriental Book Agency.
- Guenzel et al, 1983. *General Interviewing Techniques*, Ann Arbor, MI: Institute for Social Research.
- Gugler, J. (ed.), 1997. *Cities in the Developing World: Issues, Theory, and Policy*. Oxford: Oxford University Press.
- Hakin, C., 1987. *Strategies and Choices in The Design of Social Research*, London: Allen & Unwin.
- Hardoy Jorge E. and David Satterthwaite: 1989, *Squatter Citizen*, Life in The Urban Third World. London: Earthscan.
- Hardoy Jorge E., Sandy Caincross and David Satterthwaite., 1990. *The Poor Die Young*. London: Earthscan Publications Limited.
- Hardoy, J. E. and D. Satterthwaite, 1991. Environmental Problems in Third World Cities: A Global Issue Ignored, *Public Administration and Development: An International Journal of Training, Research and Practice*, Vol. 11, No. 4, p. 341-361.
- Hardoy J. E., Dian M. and David S., 1992. *Environmental Problems in Third World Cities*. London: Earthscan.
- Harris Nigel, 1990. *Urbanisation Economic Development and Policy in Developing Countries*. London: Working Paper; D.P.U.
- Hassan Arif, 1992. Seven Reports on Housing: *Government Policies and Informal Sector and Community Response*. Karachi: An OPP-RTI Publication; Pakistan.
- Henderson, V. J. 1988. *Urban Development: Theory, Fact and Illusion*. Oxford: Oxford University Press.
- Henry, G. T., 1990. *Practical Sampling*, London: Sage.

BIBLIOGRAPHY

- Herberlin, T. and R. Baumgartner, 1978. *Factors Affecting Response Rates to Mailed Questionnaires: A Quantitative Analysis of The Published Literature*, American Sociological Review, 43, p. 447- 462.
- Herz F. Martin, 1958. A Short History of Cambodia: *From The Days of Angkors to The Present*. New York: Atlantic Books, Frederick A. Proeger Inc.
- Hindson D. and McCathy J., 1994. Here to Stay: *Informal Settlements in Kwazulu-Natal*. Dalbridge: Indicator Press; South Africa.
- Hoinville, G. & Jowell, R., 1987. *Survey Research Practice*, London: Heinmann Educational Books.
- Hollnsteiner, M. R., 1977. The Case of the People Versus Mr Urbana Plenary Administrator. In Abu-Lughod, J. & Hay, J. R.(eds).*Third World Urbanisation*, London: Methuen; p.307-320.
- Honig, Emily. 1992. *Creating Chinese Ethnicity, Subei People in Shanghai, 1850-1980*. New Haven and London: Yale University Press.
- Hornby, W. F. & Jones, M. 1993. *An Introduction to Population Geography*. Cambridge: Cambridge University Press.
- Hoselitz, B., 1962. The Role of Urbanisation in Economic Development , in Turner, Roy(ed) *India's Urban Future*. Berkeley: University of California.
- Hugo, G. J. 1978. *Population Mobility in West Java*. Yogyakarta: Gajah Mada University Press.
- Igout Michel, 1993. *Phnom Penh, Then and Now*. Bangkok: White Lotus.
- Jackson, J. A. (ed)., 1969. *Migration*. Sociology Studies Vol. 2, London: Cambridge University Press.
- James V., 1991. Urban and Rural Development in Third World Countries: *Problems of Population in Developing Nations*. North Caroline: McFarland and Company, Inc., Publisher, U.S.A.
- Jeffery Roger, 1988. *The Politics of Health in India*. Berkeley: University of California Press.
- Joan Nelson: 1969, *Migrants, Urban Poverty, and Instability in Developing Nations* , Occasional Papers in International Affair Number 22; Harvard University, USA.
- Johnson, J. H. & Salt, J. 1990. *Labour Migration: The Internal Geographical Mobility of Labour in the Developed World*. London: Fultton.

BIBLIOGRAPHY

- Johnstone, M., 1979. Urban Squatters and Unconventional Housing in Peninsular Malaysia. *The Journal of Tropical Geography*. The University of Malaysia: Vol. 49(December), p. 19-33.
- Jones J. R., 1995. *Guide to Laos and Cambodia*. Paris: Old Saybrook, CT: Globe Pequot Press.
- Juppenlatz Morris., 1970. *City in Transformation: The Urban Squatter Problem of the Developing World*. St.Lucia: University of Queensland Press.
- Kannappan, S., 1985. " Urban Employment and The Labour Market in Developing Nations", *Economic Development and Cultural Change*, New York: World Bank; p. 669- 730.
- Kannapan, S, 1988, *Urban Labour Markets and Development*, New York: Research Observer.
- Kannappan, S., 1989. *Urban Labour Markets in Developing Countries*, in World Bank, Finance and Development Report 1989, New York: World Bank.
- Kerlinger, F. M. 1973. *Foundations of Behavioral Research*. London: Holt, Rinehart and Winston.
- Khavidi R., 1978. *Low Income Public Housing and Neighbourhood Planning and Development in the City of Teheran, Iran: A Geographical Perspective*. Ph.D. Thesis, University of Wisconsin-Milwaukee, U.S.A.
- Kiess, H. O. & Bloomquist, D. W. 1985. *Psychological Research Methods - A Conceptual Approach*. Boston, Mass: Allyn and Bacon, Inc.
- Kosinski, L. A. & Prothero, R. M. (ed.). 1975. *People on the Move. Studies on Internal Migration*. London: Mehtuen.
- Kritz, M., Lim, L. L. & Zlotnik, H.(ed.). 1992. *International Migration System, A Global Approach*. Oxford: Clarendon Press
- Kry Beng Hong et al, 1973. *Planning Strategy for Phnom Penh*. London: D.P.U., University College London.
- Kwong, Peter. 1987. *The New Chinatown*. New York: Hill and Wang/Farrar, Straus, and Giroux.
- Labobitz, S. & Hagedorn, R., 1981. *Introduction to Social Research*, 2nd ed., London: McGraw Hill.
- Leary, M. R. 1991. *Behavioral Research Methods*. Belmont, CA: Wadsworth.
- Liao, J. H. 1985. *Migration*. Taiwan: San Min Press.

BIBLIOGRAPHY

- Lipton Micheal, 1980. Migration from Rural Areas of poor Countries: The Impact on Rural productivity and Income Distribution; *World Development Report*, New York: World Bank; Vol. 8, No. 1, pp. 1-24.
- Lomnitz Alder L., 1977. Networks and Marginality: *Life in a Mexican Shantytown*. Berkely: University of California.
- Long C. D., 1956. The Concept of Unemployment and Labour Force: *The Labour Force Under Changing Income and Employment*. National Bureau of Economic Research, USA: Occasional Paper.
- Lowder, S. 1987., *Inside Third World Cities*. London: Croom Helm.
- Lubell, Harrold, 1991. *The Informal Sector in The 1980s and 1990s*. Development Centre of The Organisation for Economic co-operation and Development. Development Centre Studies; Paris.
- Mabogunje, A. L., 1972. System Approach to a Theory of Rural-Urban Migration. In English, P.W. and Mayfield, R. C. (eds) 1972; *Man, Space and environment: Concept in Contemporary Human Geography*. Oxford: Oxford University Press. p.193-201.
- Main Hamish and Stephen Wyn Williams(eds.), 1997. *Environment and Housing in the Third world Cities*. Chichester: John Wiley & Sons, England.
- Mangalam, J. J., 1968. *Theoretical Orientations in African Urban Studies*. In the Social Anthropology of Complex Societies. Michael Banton (ed). London: Tavistock Publications.
- Mangin, W., 1963. Urbanisation Case History in Peru. *Architectural Design*. Vol. 33, p. 336-374.
- Mangin, W., 1967. Latin American Squatter Settlements. A Problem and A Solution; *Latin American Research Review*, Vol. 2. No. 3, p. 65-98.
- Mantra, I. B. 1978. "Population Movement in 'Wet' rice Communities: a Case Study of Two Dukuh in Yogyakarta Special Region". Ph.D. thesis, Dept. of Geography, University of Hawaii.
- Marris., 1967. Motives and Methods: Reflections on a Study in Lagos, in Harace Miner(ed.): *The city in Modern Africa*. London: Pall Mall Press.
- Marsh, C., 1982. *The Survey Method: The Contributions of Survey to Sociological Explanations*, London: George Allen & Unwin.
- Mazumdar D., 1987. *Rural to Urban Migration in Developing Countries*. Published in The Handbook of Regional and Urban Economics; Mills E. (ed.), Amsterdam: Elsevier Science Publishers, B. V.
- McAuslan P., 1987. *Urban Land and Shelter for the Poor*. International Institute for Environment and Development, London and Washington D.C.

BIBLIOGRAPHY

- Meier, K. J. & Brudney, J. L., 1987. *Applied Statistics for Public Administration*, Pacific Grove, CA: Brooks/Cole.
- Meyers, J. L. 1979. *Fundamentals of Experimental Design*. Boston, Mass.: Allyn and Bacon, Inc.
- Miller, D. C., 1991. *Handbook of Research Design and Social Measurement*, 5th ed., London: Sage.
- Ministry of Economy and Finance, The Royal Government of Cambodia, 1996. *Socio-Economic Development Status, Requirements and Proposals*. Phnom Penh, Cambodia.
- Mitullah W. V., 1992. *State Policy and Urban Housing in Kenya: the Case of Low Income Housing in Nairobi*, Nairobi: Institute for Development Studies, University of Nairobi.
- Mortuza, S. A. 1992. *Rural-Urban Migration in Bangladesh: Causes and Effects*. Berlin: Berlin University Press.
- Moser, C. A. & Kalton, G., 1979. *Survey Methods in Social Investigation*, 2nd Ed., Aldershot, UK: Gower.
- Moughtin Clif, Shalaby T. and McClintock H., 1992. Who needs Development?: *Planning With The Poor in Third World Countries*. University of Nottingham: Published by Institute of Planning Studies.
- Muller Maria S., 1979. *Chawama-To make a Good Place Better: The Socio-Economic History of A Squatter settlement in Lusaka, Zambia*. London: D.P.U. Working Paper No.8, Development Planning Unit, Bartlett School of Architecture and Planning, University College London.
- Munson F. P. et al, 1968. *Area Handbook For Cambodia*. U. S. Government Printing Office, American University Washington D. C. Foreign Area Studies.
- Murphy R. E., 1971. *The Central Business District; A Study in Urban Geography*, London: Longman Group Limited.
- Nachmias, C. F. and D. Nachmias, 1992. *Research Methods in The Social Science*, London: Edward Arnold.
- National Institute of Statistics, The Royal Government of Cambodia, Ministry of Planning., 1994. *Socio-Economic Survey of Cambodia 1993-94*. Phnom Penh, Cambodia.
- National Institute of Statistics, The Royal Government of Cambodia, Ministry of Planning., 1996. *Demographic Survey of Cambodia, 1996, General Report*. Phnom Penh, Cambodia.
- O.D.A and U.N.D.P., 1996. *A Report on The Financial Services Available to The Urban Poor of Phnom Penh*. Phnom Penh, Cambodia.

BIBLIOGRAPHY

- Oppenheim, A. N., 1992. *Questionnaire Design, Interviewing and Attitude Measurement*, London: Printer.
- Osborne Milton, 1979. *Before Kampuchea: Preludes To Tragedy*. London: Allen and Unwin.
- Osgood, C. E. et al, 1957. *The Measurement of Meaning*, Urbana, Ill: Univ. of Illinois Press.
- Ozo N. O., 1986. Public Housing Policies and the Urban Poor in the Third World: A Case Study from Nigeria. *Third World Planning Review*, Vol. 8, No. 1, p. 51-67.
- Oxford Dictionary, Several Series, Oxford: Oxford University Press, England.
- Payne, G.K., 1977. *Urban Housing in the Third World*. London: Leonard Hill.
- Payne, G.K., 1984. *Low Income Housing in the Developing World: Role of Site and Services and Settlement Upgrading*. Chichester: John Wiley & Sons.
- Pongsapich Amara. 1995. *Recent Trends in International Migration in Asia*. New York: United Nations.
- Potter Robert B. and Salau A. T., 1990. *Cities and Development in The Third World*. Mansell in Association With The Commonwealth Foundation; London.
- Qian, Wenbao. 1996. *Rural-Urban Migration and Its Impact on Economic Development in China*. Aldershot: Avebury.
- Raj Mulkh & Nientied Peter, 1990. *Housing and Income in Third World Urban Development*. Oxford and IBH Publishing Co. PVT. LTD. India.
- Ray, T., 1969. *The Politics of the Barrios of Venezuela*. Berkeley: University of California Press.
- Rao, M. K. 1996. *Rural Urban Migration and Economic Development*. India: Discovery Publishing House.
- Renaud, B., 1981. *National Urbanisation Policy in Developing Countries*, Washington D. C.: World Bank.
- Richmond, A. H. 1994. *Global Apartheid: Refugees, Racism, and the New World Order*. Oxford: Oxford University Press.
- Rowe, William. 1989. *Hankow: Conflict and Community in a Chinese City*. Stanford: Stanford University Press.
- Sabot, R. H. 1982., *Migration and the Labor Market in Developing Countries*. IBRD mimeo.
- Scharping, Thomas. 1997. *Floating Population and Migration in China: The Impact of Economic Reform*. Hamburg: Verbund Stiftung.

BIBLIOGRAPHY

- Sen Asok, 1992. *Life and Labour in a Squatter's Colony*. Occasional Paper No.138. Calcutta: Centre for Studies in Social Science, India.
- Sethuraman S. V., 1992. The Urban Informal Sector in Asia: *An Annotated Bibliography*. International Labour Office, Geneva.
- Shami Seteney, 1994. Population Displacement and Resettlement: *Development and Conflict in The Middle East*. Centre For Migration Studies. New York, U.S.A.
- Schoorl, J. W; J. J. Van Der Linden and K. S. Yap (ed).,1983. *Between Basti Dwellers and Bureaucrats: Lessons in Squatter Settlement Upgrading in Karachi*, Oxford: Pergamon.
- Shipman, 1988. *The Limitation of Social Research*, 3rd ed., London: Longman.
- Simon David, 1992. Cities, Capital and Development: *African Cities in the World Economy*. London: Bellhaven Press.
- Skeldon, Ronald. 1990. *Population Mobility in Developing Countries: A Reinterpretation*. London: Belhaven.
- Speare Alden, Jr., Paul K. C. Lin and Ching-lung Tsay., 1988. *Urbanisation and Development, The Rural-Urban Transition in Taiwan*. Brown University, USA.
- Stren, E. Richard., 1975. *Urban Inequality and Housing Policy in Tanzania*, Institute of International Studies; Berkeley: University of California.
- Sudman, S. & Bradburn, N. M., 1982. *Asking Questions*, San Francisco, CA: Jossey- Bass.
- Syagga, Paul, M. & Malombe, Joyce, M. 1995. *Development of Informal Housing in Kenya: Case Studies of Kisumu and Nakuru Towns*. Nairobi: University of Nairobi.
- Tan, X. 1994. "Migration and Fertility". In Day, L. H. & Ma, X. (eds.). *Migration and Urbanization in China*. USA: M. E. Sharpe Inc.
- Tanphiphat, S., 1983. Recent Trends in Low-Income Housing Development in Thailand. In Yeung, Y. M. (ed) *A Place to Live; More Effective Low-Cost Housing in Asia*. International Development Research Centre, Ottawa.
- Tilly, C., 1979. 'Migration in Modern European History', in J. Sundin & e. Soderland(eds), *Time, Space and Man: Essays on Microdemography*, Stockholm, p.175-197.
- Turner, J. F. C., 1967. Barriers and Channels for Housing Development in Modernising Countries; *Journal of the American Institute of Planners*, Vol. 34, pp. 167-181.
- Turner, J. F. C., 1968. Housing Priorities, Settlement Patterns, and Urban Development in Modernising Countries, *Journal of the American Institute of Planners*, Vol. 34, pp.354-363

BIBLIOGRAPHY

- Turner, J. F. C., 1969. Uncontrolled Urban Settlements: Problems and Policies in Breeze, G.(ed.), *The City in Newly Developing Countries*, Prentice-Hall, Englewood Cliffs, p. 507-534.
- Turner J. F. C., 1972. Housing As a Verb. In Turner, J. F. C. and Fichter R.(eds.) *Freedom to Build*, London: MacMillan, p.148-178.
- Turner C. F. & Martin E. (eds.), 1984. *Surveying Subjective Phenomena*, New York: Basic Books.
- Turnham D., 1993. Employment and Development: *A Review of Evidence*. OECD (Development Centre), Paris.
- United Nations., 1976. *The United Nation Conference on Human Settlements: Plenary Session*, June 8 1976. Ekistic, Vol. 42; No. 252 (November), p. 251-261.
- United Nations., 1985. Department of International Economic and Social Affairs. *Migration, Population Growth and Employment in Metropolitan Areas of Selecting Developing Countries*. New York.
- United Nations., 1980. *Policies Towards Urban Slums: Slums and Squatter Settlements in The ESCAP Region; Case Studies of Seven Cities*. Bangkok, Thailand.
- United Nations. 1997. *International Migration and Development: the Concise Report*. Population Division. New: United Nations.
- United Nations Centre for Human Settlement(Habitat): 1977, *Physical Improvement of Slums and Squatter Settlements*, Nairobi, Kenya.
- United Nations Centre for Human Settlements(Habitant)., 1982. *Survey of Slum and Squatter Settlements*. Dublin: Tycooly International Publishing Ltd., Ireland.
- United Nations Centre for Human Settlements (Habitant)., 1987. Shelter For Low Income Communities: *Sri Lanka Demonstration Project*. Case Study-Part 1; Nairobi, Kenya.
- United Nations Centre for Human Settlements (Habitant)., 1996. *An Urbanising World*, Global Report on Human Settlements 1996; Oxford: Oxford University Press.
- United Nations Development Programme (UNDP), 1989. *Kampuchea Needs Assessment Study*. Bangkok.
- Van der Linden, J., 1982. Squatting by Organised Invasion in Karachi: A New Reply to a Failing Housing Policy? *Third World Planning Review*, Lahore: Vanguard Books Pvt. Ltd., Pakistan. Vol. 4. No. 4 (November) p. 400-412.
- Van der Linden, J. and Frits Selier., 1991. *Karachi: Migrants, Housing and Housing Policy*. Lahore: Vanguard Books Pvt. Ltd., Pakistan.

BIBLIOGRAPHY

Vickery Michael, 1984. *Cambodia 1975-1982*. North Sydney: Hemel Henstead: Allen and Unwin in Association with South End.

Voh, J. P., 1988. *An Analysis of Problems Facing Rural Population Displaced by Dam Construction: the Case of Tige Dam in Kano State*. Zaria: Institute for Agricultural Research, Ahmadu Bello University.

Wang, Yukun. 1993. *China: Urban Development towards the Year 2000*. Hong Kong: The Chinese University of Hong Kong.

Ward, R. G. 1980. "Migration, Myth and Magic in Papua New Guinea". *Australian Geographical Studies*, 18, pp.119-34.

Ward, P. M., 1984. Mexico: Beyond Site and Services, in Payne, G.K. (ed.), *Low Income Housing in the Developing World: Role of Site and Services and Settlement Upgrading*. Chichester: John Willy and Sons, p. 149-158.

Wates Nick and Christian Wolmar (ed.), 1980. *Squatting, The Real Story*; London: Beytrear Books, England.

Western A. C. M. Van, 1995. Unsettled: *Low Income Housing and Mobility in Bamako, Mali*. Geographic Studies. Netherlands.

World Resources Institute, The United Nations Environment Programme, The United Nations Development Programme, The World Bank. 1996. A Guide to the Global Environment. *World Resource: 1996-97. The Urban Environment*. New York:Oxford University Press.

Yap, L., 1976. *Rural-Urban Migration and Urban Under-Employment in Brazil*, Journal of Development Economics, Vol. 3, p. 227-243.

Yap, L. 1977. "The Attraction of Cities: A Review of the Migration Literature". *Journal of Development Economics*, 4, pp.239-64.

Young, E. A. 1977. "Simbu and New Ireland Migration". Ph.D. thesis in Geography, Australian National University.

Zarkovich, S. S., 1984. Some Problems of Sampling work in Underdeveloped Countries, in Bulmer, M. & Warwick, P. (eds.), *Sociological Research Methods*, London: Macmillan, pp.101- 121.

Zelinsky, W. 1971. "The Hypothesis of the Mobility Transition". *Geographical Review*, 61, pp. 219-49.

